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ART. I.—*Histoire de l'Astronomie au Dix-huitième Siecle, par M. DELAMBRE. 4to. pp. 796. Publié par M. Mathieu. Paris: 1827. The History of Astronomy in the Eighteenth Century. By M. DELAMBRE. Paris: 1827.*

THE opening of the eighteenth century, is a memorable era in the History of Astronomy. Its whole duration was illustrated by important discoveries. At its commencement, the Philosophers of Europe found themselves in possession of superior instruments to all before known; of improved methods of observation and of calculation: then also was given to the world, the first elements of that calculus, by which alone, the more recondite actions of bodies upon each other can be detected. These new instruments of discovery, were throughout the whole course of this century, applied to the utmost advantage, by skilful observers, accurate calculators, and profound analysts. The examination of the steps, by which the present high state of astronomical knowledge has been reached, is one of the utmost interest; we have in consequence been led to expect this posthumous work of Delambre with much anxiety. In perusing it, our anticipations have been fully realized; it is, in truth, one of the most valuable contributions to the history of science with which we are acquainted, and well supports the reputation acquired by the author in his former works.

We shall endeavour to present to our readers, in as concise a form as possible, the more important facts detailed in the work before us. In order, however, to render our abridgment more intel-

ligible, we shall premise an account of the state which astronomical knowledge had attained at the close of the seventeenth century, compiled from a former work of the same author,—his *Histoire de l'Astronomie Moderne*.

The origin of Astronomy is hidden from us in the most remote ages of antiquity. Man became an observer as soon as he turned his eyes to the heavens ; and successive observations, gradually increasing in accuracy, and handed down by tradition from age to age, have been the basis of the information we now possess. But even the embryo of that accuracy of knowledge, and of that exactness of observation, which are the pride of modern astronomy, cannot be traced back much beyond the beginning of the century preceding that whose history is before us. Previous to this epoch, the methods, and instruments of observation, were rude and imperfect ; the means of calculation, laborious and difficult. If, then, we are to look to the earliest ages of man's history for the rise of this science, we are to seek for the origin of all that is valuable in theory, as late as the sixteenth century ; and for all that is correct and definite as knowledge, to the celebrated and immortal names that have embellished the eighteenth of our era.

The visions of fanciful writers have discovered, in the astronomy of the Greeks, whence we derive the little that can be called valuable, that has come down to us from the ancients, the fragments and imperfect remains of a more complete system, existing in some more civilized and remote nation. From this fancied people, they conceive, that not only did the Greeks derive what they knew of astronomy, but that it was the common source of that of the Hindoos and Chinese. Delambre, in his former works,—the histories of the astronomy of the ancients, and of the middle age, has effectually dispersed this splendid vision. He has in them conclusively shown, that the astronomy of Ptolemy is in fact that of the Asiatic nations, who, so far from giving any thing to the Greeks, or from having drawn with them from a common spring of knowledge, are in truth their scholars and imitators. Wherever, indeed, we apply the test of real science to these systems of astronomy and methods of calculation, which pretend to so lofty and remote an origin, we find at every step the traces of Ptolemy and Hipparchus ; their astronomy is not only the concentration of the discoveries of the Greeks, but the basis of that of the Arabs, the Persians, the Tartars, the Hindoos, and the Chinese, as well as of that known by the Europeans previous to the time of Copernicus.

In all these systems, we find the Earth placed immovable in the centre of the Universe, and of all the planetary motions. By means of improbable hypotheses, all these nations are enabled, in the words of Ptolemy, “to save the appearances.” They all are able to predict phenomena, and the position of bodies, within a few

degrees of the truth, and appear never to have discovered these hypotheses to be erroneous, or at least to have suspected that the mistake arose from a fundamental defect in the system itself.

The first astronomer who appears to have entertained any doubt of the truth of the hypotheses of Ptolemy, is Alphonso, king of Castile. But so far from making any valuable use of the doubt that arose in his mind, he contented himself with saying, that, "had he been called to the council of the deity when the Universe was created, he could have ordered it to greater advantage."

In ages more remote than those of Ptolemy, we are told, that some Grecian philosophers placed *Fire* in the centre of the Universe, and made the earth turn around the sun in the space of a year, and on its own axis in twenty-four hours. Others, less bold, had ascribed to the earth only the latter of the two motions, and left to the sun his annual motion. But we find these ideas in no work on astronomy, nor in the pages of any geometer. Ptolemy hardly deigns to notice them; he intimates indeed, that, to ascribe to the earth a motion of rotation, would facilitate the explanation of some phenomena; but all the rest appeared to him, too absurd to merit a serious refutation.

It is to the school of Pythagoras that the ideas of the motion of the earth are usually attributed; and this opinion has derived strength from the acts of Copernicus himself. This distinguished, and we must say original, inventor of the system we now know to be true, aware of the prejudices he was about to encounter, endeavoured to support himself, against the authority of the schools, and the *dicta* of Ptolemy, by the quotation of opposite opinions, from ancients of equal authority. But these opinions are so vague, that although they might in that age of darkness serve as a support to a new hypothesis, they could not have answered in any degree as a foundation on which to build it. Archimedes indeed informs us, that Aristarchus deviated from the received opinion of the age, and supposed the earth to revolve around the sun in a circle of a radius equal to that usually ascribed to the whole celestial sphere; but he takes care to show that he is of a different opinion; and when he constructed his celebrated Planetarium, he made the earth the centre of all the motions of the other bodies of the Universe.* Plutarch informs us, that the idea of Aristarchus was with him purely conjectural, but that it had received demonstrative evidence from Seleucus; but this demonstration has not been handed down to us, nor indeed is it possible that the knowledge of the time could have furnished a correct one. Seneca says, that it is important to inquire, whether the heavens or the

* See Cicero "de Republica."

earth were immovable ; but this inquiry, so important in his view, receives no farther notice from him.

The Greeks were an acute and lively people; fond of argument and metaphysical discussion. Their sects of philosophers were divided on every possible question. It was sufficient that one school should profess any given doctrine, for it to find opposers among the neighbouring sects. The most ancient philosophers, no doubt held, in conformity with appearances, that the earth was the centre of the universe, and that the sun, by its various motions, caused the alternations of day and night, and the vicissitudes of the seasons. They were then content to imagine a mechanism by which the several less obvious and collateral phenomena might be produced. Some, of the school of Pythagoras, or perhaps that philosopher himself, for the mere sake of contradiction, placed the sun in the centre of the system, and launched the earth into the ecliptic, there to perform an annual revolution. But in what did the merit of this consist, as compared with the system of their opponents? They alleged, as their sole and simple reason, that the sun was the most noble of all bodies. To this it might have been replied, with equal force, and more of popularity, that man is the most important of beings, that all has been created for his use, that it was fit that his abode should be fixed and permanent, and proper that the heavenly bodies should turn around him to give him light, and afford him vital heat. Such reasons, if in truth no better than those of the Pythagoreans, carried with them at least more of probability, particularly as they are consistent with the impressions derived from our senses. And what motive can we suppose the people of Greece would have to reject the apparent evidence of their senses, and believe in the motion of the earth? They had not observed a single phenomenon which could not be accounted for on the other hypothesis ; even the stations and retrogradations of the planets had been explained by means of it. They were ignorant of the great size and distance of the heavenly bodies ; the improbability of their being created especially and solely for the use of the inhabitants of our earth, could not therefore have occurred to them. In truth, it is almost within our own days, that the astronomic phenomenon, which shows conclusively the annual motion of the earth, has been detected ; and the truth of its diurnal motion of rotation was supported by no known fact, not equally applicable to the hypothesis of Ptolemy, before the latter end of the seventeenth century.

Until these dates, and before the discovery of the universal influence of gravitation, even the most determined of the followers of Copernicus, were obliged to resort, in defending his theory, to the evidence of probabilities alone. They were compelled to sustain their opinion by exhibiting the simplicity of the views of

their master, when compared with the complex absurdity of the system of Ptolemy. But this very argument was wanting to the ancients : for the complexity of that system, as we find it in the hands of its last supporters, had not yet been introduced ; for the simple reason that observation had not yet become so nice as to show the necessity of the innumerable encumbrances with which, in a more advanced state of practical astronomy, it became necessary to load it.

We find, in truth, in ancient authors, but few traces of an opinion analogous to that of Copernicus ; and even had it been taught in the school of Pythagoras, of which we discover evidence in the works of Cicero and Vitruvius alone, it is evident that it had met with few followers, and had been finally entirely forgotten. If a true view of the subject had ever been brought forward, all traces of it had been obliterated, and it was left to Copernicus to discover it anew.

It is, then, by Copernicus, that the motion of the earth has been introduced as a fact in astronomy ; he it is that first demonstrated how the revolution of our planet around the sun was capable of explaining the succession of the seasons, and the precession of the equinoxes ; who showed with what simplicity motions performed, at unequal rates, in orbits concentric at the sun, give rise to the phenomena of stations and retrogradations. He placed astronomy upon a new and consistent basis, and by the important change he introduced, opened the way for all subsequent investigations.

It is to the enthusiasm excited in the mind of Kepler, by the new truth given to the world by Copernicus, that we owe the discovery of the figure of the planetary orbits, and of the laws of their motions. The bare and naked idea of the earth's motion, had been unproductive among the ancients, because it had never been seriously entertained by astronomers. Its publication forms the epoch of modern astronomy.

But if Copernicus be entitled to the glory of being the founder of modern astronomy, that of being its legislator was reserved for a genius of even higher and more daring order. Copernicus seems to have been dismayed at his own boldness, and to have wanted the courage to put the finishing hand to his work. He in truth delayed its publication so long, that he did not receive a complete copy until the very day on which he died.

The system imagined by Copernicus, is one of extreme beauty and simplicity. By his introduction of circular orbits, supposed by him at first to be concentric at the sun, he suppressed at one blow all the epicycles with which Ptolemy and his followers had been compelled to load the path of their planets ; the phenomena of stations and retrograde motions, become simple corollaries of the different radii of the orbits, and different rates of motion

of the planets. All the parts of the system are in close connexion with each other, the mutual relations are determinate, and all the distances are commensurable. On the other hand, in the ancient system, all is incoherent and vague ; each of the planets might be considered as nearer, or farther, indifferently, provided the order of distances were not inverted, by bringing closest to the earth a planet of the longest zodiacal revolution.

These advantages of the system of Copernicus, are of themselves highly important. Of them, none of the ancients had the least suspicion, for had they been aware of them, it is impossible they could have avoided dwelling upon them. If, however, in its general features, the system of Copernicus be thus brilliant and imposing, in its detail it was far less complete. The author lays down as an axiom, that all the motions are circular and uniform, while observation makes us acquainted with none that are not constantly varying. To account for this, Copernicus was finally compelled to give to each of his circular orbits a different centre ; the sun is enclosed within all the orbits, but does not occupy the centre of any ; it has no other apparent duty, but to distribute light, and appears unconnected with any of the motions. In fine, in order to reconcile the appearances with the theory, he was compelled to recur again to new epicycles, after having suppressed those of Ptolemy.

An important step was however made by him, without which a farther progress was impracticable. But if the reformation had proceeded no farther, practical astronomy would have gained little by the change. The founder of modern astronomy was not in possession of a sufficient series of good and authentic observations ; he had not the taste or fitness for long calculations. To have done all, would have required more years than fall to the lot of man, and three whole lives were employed before the task begun by Copernicus was completed. Tycho Brache made the observations for which the life and strength of Copernicus were insufficient, and dying, left Kepler in possession of all that was necessary to complete the revolution in the system of astronomy.

Plutarch tells us, that an ancient philosopher had said, that the Greeks ought to have brought to trial as impious, him that had dared to disturb the sanctuary of Vesta, by ascribing motion to the earth. Such was the fate Copernicus feared for himself, and which caused him to defer for thirty-six years the publication of his book.

Tycho, who is entitled to the gratitude of astronomers for his observations, made a retrograde step in the theory, by proposing a system intermediate between those of Copernicus and Ptolemy. It is uncertain whether he were actuated by the theological scruples of his day, or ambitious of the glory of creating a new

theory. Rich, and of one of the first families of Denmark, he devoted his whole life and fortune to the cultivation of astronomy. His instruments were far superior to any used before him, and besides discovering several inequalities of motion previously unknown, he left to his successors a regular series of observations of all the known planets. These were made and recorded, for the purpose of proving the excellence of his own system ; but falling into the hands of Kepler, the latter made a more happy use of them, in establishing, on a secure and everlasting basis, that of Copernicus. Tycho had luckily completed all that his peculiar views would have permitted him to perform, when a persecution, the cause of which is ill understood, deprived him of the countenance of his sovereign, and forced him to expatriate himself. Lalande has devoted to infamy, and the execration of all future ages, the minister Welchendorp, who is named as the principal author of this persecution. In similar terms, probably, future historians of astronomy, will speak of those politicians of our country, who, from ill-judging economy, frustrated the survey of the coast, and prevented the establishment of a national observatory, after all the preliminary steps had been taken, and the greater part of the preparatory expenses incurred. Such acts frequently arise from ignorance rather than malice ; they excite little attention at the moment, but are sure to be visited by the retributive sentence of posterity.

Before the time of Kepler, astronomers paid but little attention to physical causes. This was the case even with Copernicus himself. They were content with imagining an hypothesis that might serve as the basis of their calculations. Kepler, on the other hand, was unwilling to admit any thing without a reason ; and having detected an error of 8' in the best predictions of the positions of a planet, he set himself to investigate a theory that should be more consistent with the phenomena. His course of inquiry was curious, and founded upon views of the harmony of numbers, and perfection of curves, that we know now to be incorrect, but which we cannot help rejoicing that he entertained.

He commenced by inquiring why the number of planets was limited to six, and upon what principle the ratios of their respective distances from the sun, in the system of Copernicus, were founded. In the course of this inquiry, he detected a series, to which the six planets conformed, with the exception of a single interval, where he inferred a planet was wanting. This gap has been filled by the modern discoveries, and besides, another planet has been discovered, which takes exactly the eighth place in the series of Kepler. Of this series, thus found consistent in all its parts, we yet want the physical reason.

He next sought the relations between the distances and the periodic times of the planets, and after seventeen years of labour

and research, discovered the famous law, which still goes by his name, viz. that the squares of the periodic times are proportioned to the cubes of the distances. He failed in giving a mathematical demonstration of this law, which depends on a principle he did not understand; but he showed, from its coincidence with the phenomena, that it was true of the earth and the five other planets then known. This relation has been verified in the case of the five planets since discovered; and has been shown to be equally true of the satellites of Jupiter and Saturn.

The second law of the planetary motions discovered by him is, that their orbits are not circles, as had been always supposed before, but ellipses. The motions in them were therefore essentially unequal, and he thus refuted the ancient axiom, retained even by Copernicus, that ascribed to these bodies uniform circular motions. This law was demonstrated by Kepler in a most ingenious and original manner.

The theory of uniform and circular motion, had hitherto been the foundation of all the calculations used by astronomers. In acquiring, therefore, the knowledge of the true figure of the orbits, every existing mode of calculating the phenomena became useless. It was for this reason necessary to discover some new principle of uniformity, which was now shown not to exist either in the eccentrics or the equants of the ancient school. Kepler found this in the areas described by the *radii vectores*, which he made to vary in the proportion of the times of their description. This was at first deduced from observation alone, but he finally succeeded in demonstrating its necessity; and this demonstration, reproduced by Newton in a more rigorous form, is now universally received. By the aid of this principle, the direct calculation of elliptic motions becomes possible, but is still attended with great difficulty. These difficulties were removed by an artifice of Kepler's, who comprised the whole calculation in the determination of the elliptic from uniform circular motion, by means of three elegant and simple formulæ, sufficient for all the purposes of practical astronomy.

By these brilliant discoveries, the sun was at last brought to occupy the place Copernicus had wished to assign it, but whence, in consequence of an erroneous hypothesis in respect to the motions, he had himself been compelled to remove it. The sun cannot occupy the common centre of circular orbits, but it does a focus common to all the elliptical paths of the planets. To this point, as a centre, all the motions must be referred; from it, all the distances must be counted. The planes of these ellipses cut each other in lines passing through the centre of the sun, and all the lines of their nodes pass through the same centre.

It was in attempting to reduce all the motions to physical causes, that Kepler was led to the discovery of these fundament-

al laws, of which no former astronomer or mathematician had even suspected the existence. When he found that the sun really occupied the common focus, and centre of motion of the system, he became aware that it must be the principal source and director of their motions. He ascribed to it a mass capable of attracting and moving all the planets. He even ventured to declare that the sun must revolve upon his own axis, and that in a space of time less than three months. He finally saw that *Universal Gravitation*, must be a law of nature, and thus wanted but one step of reaching the discovery of Newton. From some inadvertence, difficult at the present moment to conceive, he inferred that this attraction must decrease in the simple ratio of the distance ; and committed this error, even although he had established completely, that the intensity of light diminished in the ratio of the surfaces over which it is distributed, that is to say, as the squares of the distances.

Bouillaud, a French writer on astronomy, in a work published in 1643, pointed out the mistake of Kepler, but instead of availing himself of this fortunate discovery to improve the theory, he used it as an argument against the laws of Kepler, with which, on the contrary, it is absolutely and completely consistent. Thus, for a second time, did the true law of attraction elude the grasp of astronomers; and it was not received nor appreciated until it was demonstrated by Newton.

While Kepler was thus correcting and completing the system of Copernicus, rendering it fit to form the basis of the future calculations of astronomers, and engaged in labours of which the whole value was long unappreciated, it was, almost at the same moment, receiving elucidation in another direction, to estimate the importance and consequences of which, required little more than the use of the faculty of sight. The telescope had been discovered in Holland, we hardly know whether by accident, or by the curiosity of an amateur of philosophy of the name of Metius. Galileo, a name so deservedly celebrated in the annals of philosophical discovery, hearing the news, sought to divine the mode of forming the instrument, and completed one within a day from the time he received the intelligence, equal in power, but different in composition, from the original. In the hands of the inventor it had been directed solely to terrestrial objects ; Galileo pointed it immediately to the heavens. He speedily detected phases of the planet Venus, precisely similar to those of the Moon. Copernicus, it is said, had announced that such phases were the necessary result of his system; adding, that they could not be observed, in consequence of the small apparent diameter of the planet, and the brilliancy of its light. Galileo's inference was the converse of this : from the phases he deduced that Venus revolves around the sun. On turning his instrument to Jupiter, he found

that large planet to be attended by four satellites or moons, which performed around it revolutions much more rapid than those of our own moon. He here found a confirmation of the opinion, that this last named body might accompany the earth, in an annual revolution around the sun. On the disk of the sun itself, he perceived spots by whose motion he determined the rotation of that great sphere on its axis. He even saw the ring of Saturn, but his telescope had not sufficient power to exhibit it separate from the planet, and the discovery of its true character was left for Huygens. The telescope, thus fertile in the hands of the first who pointed it to the heavens, has continued from that time to be the most powerful instrument of discovery.

The next important present made by the discoverers of the seventeenth century to their successors, consisted in the logarithms of Napier and Briggs. We have in another place dwelt upon the merit of this invention, and explained its principles.* Another and not less important discovery was the application of the Pendulum to the measure of time, proposed by Galileo, and adapted to the clock by Huygens.

Furnished with the telescope and the clock, the facilities for observation were multiplied and increased prodigiously. The former was used not only as facilitating the simple inspection of the heavenly bodies, but was applied to graduated instruments, in order to direct them with greater precision to their objects, and render them capable of measuring angles with greater minuteness. We are indebted for this application of them to Picard. Before this, the observations of the motion of the sun, had been extremely difficult and rude, and the determination of his place in respect to the fixed stars, invisible as they are during his continuance above the horizon, susceptible of little accuracy. The shadow of a gnomon furnished to the ancients the best of their methods of determining the angle of his apparent circular path with the equator. The observation of the solstices, the sole mode of ascertaining the length of the solar year. The motion of the sun in longitude, was investigated by means of an instrument that is now reduced to a mere illustration of the doctrine of the imaginary celestial sphere. Ptolemy had proposed the introduction of the quadrant, instead of the simple gnomon, for the former of these purposes, an instrument equally applicable to observations of the stars; but to compare their position with the sun, no better method than that of the armillary sphere was found, until the clock was provided for the use of astronomers. Tycho Brache was the last who employed the armillary sphere. This instrument, as its name imports, was a skeleton globe formed of rings. These represented the several great circles of the sphere, and the apparatus was, like our

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globes, suspended from a meridian moving in a horizontal circle. This instrument being rectified for the latitude of the place, and the meridian circle made to correspond with the plane of the true meridian, the axis of motion would be parallel to that of the earth, and point to the poles of the heavens. The position of the sun in the celestial sphere could be determined daily, by making the shadow of the upper half of the ecliptic, fall upon the lower. The point opposite to the sun, would then mark out his position in that circle, and might be made to follow his diurnal course by a motion of the sphere on its axis, that would keep the shadow constantly applied to the lower part of the ecliptic. The day of the equinox would be pointed out by a triple coincidence, for the shadows of the equinoctial colure, and the equator, would also coincide with their respective places. If on such a day the moon should be in her first quarter, and visible before the setting of the sun, an intermediate point of comparison would be furnished; the sphere might be made to follow the motion of the moon when the sun ceased to be visible, and thus to pursue the course of the sun below the horizon. The stars were next observed, by means of sights, affixed to rings turning on the poles of the ecliptic, whose direction would give the position of the stars on the celestial sphere, and in relation to the sun; and on the setting of the moon, one of the stars might be used to continue the regular motion of the instrument. In this way, the places of the stars, in reference to the equinoctial points, and the sun's apparent path, were ascertained. These positions, estimated in a northern and southern, or an eastern and western direction, were called, in terms borrowed from geography, latitude and longitude. But these names have on earth, reference to the terrestrial equator, while in the celestial sphere, they refer to the sun's path, or the ecliptic. We cite this, as an instance of the uses that might be made of this instrument, and it will be evident that the wonder is merely, that with its observations as accurate as those of Tycho, which were correct to a minute of a degree, could have been made.

The introduction of an accurate measure of time, changed at once the plan of observation, and the method of determining the places of the heavenly bodies. The intervals of their passages over the meridian, reduced to portions of a great circle, give the angular distance at the pole of the equator, or what is called the difference in right ascension; while the meridian altitude, in places whose latitude is known, gives the distance north or south of the equator, to which the name of declination is given. Pairs of observations, of the time of the passage of the sun over the meridian, and of his declination, taken at equal intervals on each side of the day of the equinox, give the inclination of his apparent path, the position of the equinoctial point in the celestial

sphere, and the instant of the equinox. All these determinations were much facilitated, when the telescope was applied to the instruments used by observers.

We have stated that this is due to Picard. Morin had previously shown, that with the telescope the stars might be observed in open day ; but in order to determine their positions, it was necessary to find the means of ascertaining the position of the optical axis of the instrument, or at least of fixed points in the field of view. This was effected by placing wires crossing each other in the focus, which are thus visible as distinctly as the object itself. Huygens added to these, plates of various breadths, which being moveable, could be changed until one were found that exactly covered the disk of a planet, or filled up any other small angular sphere ; he thus gave the first idea of the micrometer. One important step remained still to be made ; namely that of applying the telescope as a sight, to instruments intended for the measure of angles, and this Picard at last accomplished. His use of these instruments was however rather applied to Geodesy, than to pure Astronomy. With them he measured a degree of the meridian between Paris and Amiens, and thus provided Newton with an indispensable element, in the calculation by which he showed that the attractive force of the earth extended to the lunar orbit.

Picard, after he had overcome the difficulties that attended the adaptation of the telescope to circular instruments, was prepared to lead the way in the observations which have embellished the present century ; but all his efforts were insufficient, when counteracted by the miserable parsimony of the government of France. He was compelled to wait ten years for a mural quadrant, although he demanded it in the most earnest manner, and did not receive it until too late for him to use it, not having lived even to see it set up in the meridian. While waiting for it, he placed a simple telescope, revolving on a horizontal axis, in the meridian, and thus first used the transit instrument, so valuable in its subsequent applications.

Olaus Roëmer, a Dane, the pupil and friend of Picard, improved upon his idea ; he united the advantages of the transit and instrument for measuring angles ; giving to the latter the form of a complete circle, instead of that of a mere quadrant. We shall have occasion to recur to the value of this form, in speaking of modern instruments. We have only to state here, that this most happy idea remained neglected and unimproved, from his day until our own, when, in the hands of Reichenbach, it has furnished the principle of the most perfect instruments that have yet been constructed, those in the observatories of Altona and Königsberg. The great observatory of Copenhagen, where Roëmer was placed as astronomer, was, with all its instruments,

and papers, destroyed by fire ; in the same manner also was his private observatory in his own house ; and no record is left of all his valuable observations, except the Journal of three days, of which he had luckily multiplied and distributed copies. Thus again the improvement of scientific astronomy was retarded, and Flamsteed was left to reap the honours that would otherwise have accrued to Roëmer.

When simple sights were employed with instruments for measuring angles, it was possible to divide their limbs to a degree of accuracy greater than that with which these sights could be directed to the object. On the application of the telescope, the reverse became true. Hence it was necessary that means should be found to subdivide the smallest divisions of the limb, until they corresponded in minuteness to the precision with which the telescope could be directed. This was attained by the invention of Vernier, who planned an addition for the purpose, that still goes by his name. It is too well known to need description here ; suffice it to say, that it is hardly possible to speak in too high terms of its value in practice. Newton, Flamsteed, and Halley, commenced their astronomical career in the seventeenth century, but their publications were principally made in the eighteenth, within which Delambre comprises the history of their discoveries.

Having thus exhibited the condition of the science at the close of the former of these ages, we shall proceed to show the more important of the several steps by which it was brought to the state of perfection in which we find it at the beginning of the present century.

Newton is deservedly ranked, by the just pride of his countrymen, as the greatest of philosophers and mathematicians. He was also the most fortunate. An universe to explain, and the materials in readiness for the explanation, can occur but once in the history of mankind. The circumstance that led him, at the age of twenty-four, to his great discovery, is trivial, and has been so frequently detailed, as to need no repetition here. Suffice it to say, that ascribing the fall of heavy bodies to an attraction exerted by the earth, and being aware that this force did not diminish perceptibly, within the limits at which experiments are possible, he inferred that its influence extended to the moon. That it could not act there with the same force as at the surface, was obvious ; but the law of the decrease was not yet determined. Gallileo had ascribed the fall of heavy bodies to the earth's attraction, and Kepler had conceived an attraction of the same kind to extend from the sun to all the bodies of the solar system ; he had, however, as we have seen, mistaken the law of the decrease, and the phenomena were consequently at variance with his theory. Newton instantly seized the true law of the decrease of the at-

tractive power of the earth, viz. with the increase of the squares of the distance, and applied this principle as the test of the truth of his idea. The fall of the moon from a tangent to her orbit, in a given but small portion of time, would be the measure of the force by which she is drawn to the earth, and this, compared with the space passed through by a heavy body near the surface of the earth, would give the ratio of the intensity of the force, in the two different places. To make the calculation, it is not merely necessary to know the distance of the moon, in terms of the earth's semidiameter, but also the actual size of the latter.

The books used by nautical men, and in elementary education, at the time, gave as an estimate of the length of a degree of a great circle of the earth, no more than sixty English miles. Upon this estimate, as the basis of his calculation, Newton investigated the moon's deflection from a tangent to her orbit. It was found to differ essentially from that deflection which is obtained by observation. Hence Newton, who had the courage to abandon even his own favourite hypotheses, if contrary to experience, felt himself constrained to give up the hope of explaining the phenomena, by means of his simple and probable theory of the variation of the force of gravity. Some years after, a letter from Dr. Hooke, led him to investigate the curve that a body let fall from a great height would describe, when the rotation of the earth upon its axis was introduced as an element of the calculation. In the course of this inquiry, he returned again to his original ideas respecting the moon, and setting out from the measure of a degree recently executed in France by Picard, he attained a complete conviction of the truth of the principle whence he had originally started. In respect to the heavy body in question, he inferred that it would describe an ellipse of which the earth would occupy the focus. This, then, was the true form of the lunar orbit. Applying the same principle to the primary planets, he had the pleasure to find that his investigation, commenced as a matter of mere curiosity, led at once to the most important practical results.

Before this time, all investigations into the law of the decrease of the gravitating force, had been upon the hypothesis of circular orbits, except the incomplete one of Kepler. Several of Newton's contemporaries had reached the true law, upon this supposition, as early as himself. Borelli, in 1666, had generalized the idea of gravity, and extended it to all bodies; in 1674, Hooke, in a work on the motion of the earth, gives a clear idea of attraction, but does not speak of the true rate of its diminution, until 1678; in the following year, he announces that an eccentric elliptical orbit, is a consequence of an attractive force, varying inversely with the squares of the distances; this was, however, subsequent to his correspondence with Newton. Wren was, at

the same epoch, acquainted with the same law of decrease. And in 1684, Halley determined, as a consequence of Huygens' theorems on central forces, that the force which retains the planets in their orbits, supposed to be circular, is in the reciprocal ratio of the squares of their distances from the sun.

Newton, however, was aware of this law at the earliest of these dates (1660), when he made his first calculation in respect to the gravity of the moon ; but he then, like the others, assumed concentric circular orbits, an hypothesis at variance, as we have seen, with the phenomena. The investigations which we have referred to, as undertaken by him at the suggestion of Hooke, terminated in a complete solution of the problem. He was the first to demonstrate, that in an elliptical orbit, the force which tends to the focus, follows the law of the squares ; and that under this law the periodic times in the ellipse are in the sesquiplicate ratio of the greater axes. These being identical with the laws of the motions of the planets, deduced by Kepler from observation, it follows directly, that the force by which these bodies are retained in the orbits, varies inversely with the squares of the distances ; and he moreover deduces, that the curve described under the action of such a force, must be a conic section. These great discoveries, the basis on which rest the mechanics of the heavens, were, at the instance of Halley, demonstrated and arranged in the *Principia*. In making them, there can be no doubt that Newton had used a calculus far more powerful than had been possessed by any preceding mathematician, and was hence the first, although not the sole, discoverer of the method we now style differential, or Fluxions. But in giving his discoveries to the world, he chose, instead of detailing and explaining the steps by which they had been attained, to give in most cases no more than simple demonstrations of the truth of his propositions, in the synthetic method of the ancients. Exactly as in the works of their geometers, we rarely find any trace of the analytic process by which the theorem was originally found.

Newton was endued with a sagacity and reach of thought, almost more than human. The rapidity and certainty with which he reached his ultimate results, were astonishing and prodigious. The steps therefore so evident and satisfactory to his own mind, were hardly capable of explanation to others. The mechanical and metaphysical parts of the calculus he had employed, could hardly have excited his attention, in the ardour with which he pressed to the attainment of his inferences. Hence it became easier to him to make geometric solutions, than to retrace and explain in a sufficiently simple manner, the processes employed by his own mind. In some respects, this was attended with most important advantages. His work was at once placed within the reach of all those versed in the geometry of the ancients. As

this included all who pretended to mathematical knowledge, his discoveries became at once extensively known and familiarly understood.

The method adopted by him in this publication, was indeed injurious, for a time, to his own reputation. The envious were willing to limit the knowledge by which he had reached his immortal discoveries, to the elements that sufficed for the comprehension of their demonstrations. On this point arose a question, that was agitated with great asperity and violence, but which did not the less tend to the advancement of mathematical knowledge. So far, however, from being behind others of his age, in an acquaintance with more powerful instruments of research, he did all that at the epoch was possible, and to complete his work, or correct such parts of it as are not equally happy with the rest, has occupied a succession of the most profound analysts for more than a century.

But the *Principia* of Newton had, from their synthetic form, an effect in retarding the progress of his own countrymen. Accustomed to acquire the facts and principles through his demonstrations, they neglected the search for, and the improvement of, the methods whence they had been originally derived; and thus, in the subsequent history of the advance of the mechanics of the heavens and the fluxional calculus, we hardly find a single name of a native of Great Britain to cite, except those of his commentator M'Laurin, and Thomas Simpson.

In the *Principia*, Newton has fully and completely solved the problem of the motion of two bodies, mutually attracting each other. But it is obvious, that, on the principle of this mutual attraction, every body in the system must have an effect, in disturbing the motions of the others, with a force proportioned to its mass, and inversely as the square of its distance. Hence arises the famous problem of the *three bodies*, or to determine the orbits described by them, when propelled with given forces from three points, and left to their mutual action. Newton attempted this problem in the case of the sun, and a planet attended by a satellite, but his methods were not sufficiently powerful for the complete attainment of his object. It is, however, the glory of his philosophy, that it is not limited to the point to which it was carried by its author; the principles on which it is based, are universal and immutable, and are hence capable of application to every new fact, and of extension, almost indefinitely, by new instruments of analysis. The persons who have most distinguished their names in the completion of this problem, are Clairaut, D'Alembert, Euler, Lagrange, and finally, Laplace. To their successive labours it is owing, that no observed inequality or oscillation of motion in the solar system remains, that has not been accounted for, on the principles of the theory of Newton; Nay, so

far from the investigations having been limited to the explanation of known phenomena, they have been extended to the discovery and calculation of inequalities that observation had not detected. Thus, but three inequalities of the lunar motion were obtained from observation; two more were added by Newton, from his partial solution of the problem of the three bodies; while we now use more than thirty equations, deduced from the theory of celestial mechanics, when the place of the moon is to be predicted for a known instant of time.

Among the more important investigations of the principia, is that of the figure of the earth, acted upon by gravitation and the centrifugal force arising from its rotation on its axis. That this must be an oblate spheroid, is satisfactorily demonstrated; the theory has since been improved by Clairaut, and extended by Laplace, to cases other than that of a homogeneous body.

The fact, that the actual intensity of gravity was lessened by the centrifugal force of equatorial regions, was first observed by Richer, a French astronomer, at Cayenne. Subsequent and repeated experiments have tended to the complete proof of its truth. Measurements of the earth have since demonstrated its oblate figure, and the whole have terminated in the most full and satisfactory evidence of the rotation of the earth upon its axis, at a uniform rate, in the space of a sidereal day.

The revolution of the earth, in an annual orbit, around the sun, the remaining great fact in the system of Copernicus, has also been established beyond the possibility of cavil. The proof was at first sought in the annual parallax of the fixed stars; but this was soon discovered to be so small, as, were it even within the reach of the instruments employed, to be cloaked by irregularities of a greater amount, and arising from other causes. Picard, in the course of his astronomical and geodetic researches, had discovered an annual variation in the position of the polar star. The same fact was afterwards noticed by other astronomers, particularly by Flamsteed, who watched it for nine years, in the hope of demonstrating the motion of the earth by means of it, considered as an annual parallax. This, in truth, was the first idea that would present itself to an astronomer; but when these anomalies were reduced to the test of calculation, it was found that they were very different from what an annual parallax would produce. Picard had determined, that in the case of the polar star, the annual change amounted to 40"; the inferences of Flamsteed were less correct. In 1725, Molyneux commenced observations upon the star γ *Draconis*, Bradley luckily visited him while engaged in this inquiry, and on the former being called off from it, by a public appointment, continued the observations. By carefully watching eight different stars, he found that each described a small ellipsis around a fixed point in the heavens, the greater axis

of each of which was of the same magnitude, while the lesser axis varied. The fact of the motion, and that under a very peculiar law, entirely different from annual parallax, as well as in a contrary direction, was therefore evident. Having discovered the motion, he next set himself to investigate the physical cause. In this pursuit he was successful. It is said, that when sailing upon the Thames, and in the act of beating against the wind, he perceived that the course of the vessel changed for some time after the instant of tacking, until the maximum of motion was attained, and that therefore the relative direction of the wind, observed on board of a vessel in motion, was different from that which it would be, on board of a vessel at rest, or upon the shore. It therefore occurred to him, to combine the motion of the earth in its orbit, with that of light, in the same manner that those of the vessel and the wind are combined; he found, that, taking the velocity of light, as estimated by Roëmer, from the eclipses of Jupiter's satellites, the change in the apparent position of the stars must be exactly such as it appeared from his observation. In this investigation, he was aided by a fortunate circumstance; for this apparent motion was, during the first year of his researches, entirely free from another variation, by which, under most circumstances, it is affected. It was this very complication that had so embarrassed Picard. In continuing his observations, for the confirmation of his theory, Bradley speedily perceived it; but, as he was now enabled to keep a separate account of it, he detected another small inequality, corresponding in its period with a revolution of the nodes of the moon. This is the *Nutation* of the earth's axis, the cause of which belongs to celestial mechanics, and shall be omitted, as we propose to make the history of that branch of astronomy the subject of a separate article. It may be represented, by ascribing to the pole of the earth, a retrograde revolution, in a circle whose radius is 9", around its mean place, in a period of eighteen years.

It is to these two discoveries of Bradley, that we owe all the accuracy of modern astronomy. Before they were made, it was impossible for the most careful observer to make the apparent right ascensions of a star, correspond nearer than from 50" to 60", or the declinations more closely than half a minute. This double service places Bradley on the very highest level among practical astronomers; Hipparchus and Kepler are alone to be compared with him, in the importance of the steps they made in the practice of this science.

It is not sufficient to satisfy our curiosity, that we know the magnitude of the earth itself, or even its weight, which; as we shall see hereafter, has been ascertained; but astronomers did not rest, until they found the relation between that magnitude and the distances of the other bodies of our system. These distan-

ces are within the reach of calculation ; for whenever they are not so great as infinitely to exceed the diameter of the earth, the apparent position of the heavenly body, whose distance is sought, will be different, as seen from the surface or from the centre of the earth. This difference is called parallax. The moon is so near to us, that the determination of her parallax is attended with but little difficulty ; but it is not so with the other planets. If, however, it were possible to obtain the horizontal parallax of any one of them, those of the sun, and of all the others, become the results of a simple calculation. Mars, which is observed annually in opposition to the sun, is, under ordinary circumstances, the most convenient for this purpose. The smallness of the quantity is, however, such as almost to escape observation. Hence, the magnitude of the solar system was not known, until it became possible to make use of another and extremely rare celestial phenomenon. This is the transit of Venus over the disk of the sun.

Venus being the nearest of the planets, her parallax is the greatest ; but, from the circumstance of her constantly accompanying the sun, the methods applicable to the Moon and Mars, are not adapted to the case of this planet. But when she passes directly between the earth and sun, she may be seen, by the aid of the telescope, passing over the disk of the latter. The ingress and egress will be affected by parallax, precisely as in the case of a solar eclipse. Observations, either of the beginning or end at two places, or of both beginning and end at a single place, will furnish data for the calculation ; but greater certainty may be obtained, by the comparison of a great number of observations.

Kepler first pointed out, that such a phenomenon must occasionally occur, although, from the inclination of the orbit of Venus, it must be extremely rare, and Horrox, an English mathematician, was the first who predicted such a transit with certainty ; he also had the great good fortune to observe it.

It was, at the time, considered by astronomers as no more than a curious phenomenon, more interesting from its infrequency ; but Kepler evidently saw that it might be attended with important consequences, although he does not enumerate them. Halley was the first who pointed out, in express terms, their value in determining the dimensions of our system. The attention of the learned of Europe was in consequence strongly excited, and preparations were made, in various parts of that continent, as well as at St. Helena, at the Cape of Good Hope, and at Tobolsk in Siberia, at Calcutta, at Madras, and at Tranquebar, to have it carefully observed. Many unexpected causes, however, interfered, and a very considerable discrepancy was found in the results calculated from the various observations ; some of the best prepared and most practised observers, lost the sight alto-

gether, in consequence of the weather ; and, upon the whole, the determination was generally considered as inconclusive. Short, however, who gives, in the transactions of the British Royal Society for 1763, a calculation of the sun's parallax, from all the observations, observing that four of them differed far from the limits within which all the rest were included, proposed to omit them. On leaving them out of view, he obtained a parallax for the sun of $8^{\circ} 69'$, almost identical with what is now received. All these four, that are rejected, can be made to confirm this conclusion, if it be admitted that the counting of the seconds was correct, but that the wrong minute was written down ; and in one of them, the observer himself, on recollection of the circumstances, made this correction before the calculation of Short.

This partial failure of the transit of 1761, caused a still greater excitement in relation to that of 1769. Several of the governments of Europe vied with each other in their exertions to send competent observers, furnished with the best instruments, to various parts of the world. In Europe, only the immersion would be visible, and at a late hour ; except, in high latitudes, where the emersion might be visible after sunrise of the next morning, and within the polar circle, where the sun did not set. Such a position as the last, the most advantageous of all, was occupied at Wardhuys, in Lapland, by Helle, under direction of the Danish government. The British government despatched the celebrated Cooke to Otaheite, to observe in the opposite hemisphere. The value of these two sets of observations, one in a high northern, the other in the southern hemisphere, was first pointed out by Hornsby, the professor of astronomy at Oxford. It escaped the notice of Lalande, who had busied himself in, and wished to assume the direction of the whole proceeding, as well as the compilation of the results. Disgusted with his pretensions, both the British and Danish governments kept their intentions secret, and Lalande had the mortification to find, that the best selected stations were chosen and occupied advantageously, without his knowledge.

The circumstances for the observation of this transit were, in our own country, much more favourable than in any part of the continent of Europe, except in the higher latitudes. Under the influence of the distinguished men who founded the American Philosophical Society, these favourable circumstances were improved to the utmost. Three committees of that body were formed, who observed separately, at Norriton, in Philadelphia, and at Cape Henlopen. Of the first committee, were Dr. Smith, Provost of the University of Pennsylvania, and the celebrated Rittenhouse ; of the second, Professor Ewing, and Dr. H. Williamson ; of the third, Mr. Owen Biddle. The state of the weather, and the attention and skill of the observers, place their

observations in the very highest rank ; they, in consequence, received the most marked commendations from the British Astronomer Royal, who was in active correspondence with the society on this interesting subject. By previous agreement, he instantly communicated his own observations, and those made at the Lizard, by Mr. John Bradley. From a comparison of these with the observations at Philadelphia, Dr. Ewing calculated the solar parallax, without loss of time, and made it $8.69''$. The circumstances were however such, as to admit of a direct calculation of the parallax, without reference to any other observation. This was done at once by Dr. Ewing, who, on the 19th day of July, made the report of the Philadelphia committee, containing a calculation of the parallax, from his own observations, of $8.6838''$. Dr. Williamson's calculation, from his separate observations, was also submitted at the same time, and makes it $8.685''$. Thus, the first positive determination of this most important element in astronomy, was made in this country, and was identical with the determination of Short, when he had rejected the four observations which he considered as suspicious. When the other observations made in England, and those at Upsal and Stockholm, were received, Provost Smith calculated the parallax again, by comparing them with the Norriton records, and obtained $8.6''$.

We have dwelt at some length on the acts of Rittenhouse and his associates ; for it is the chief glory of American astronomy. It is almost the only instance in which we find the governments of the ancient provinces, or of the present states, aiding this science by patronage and the appropriation of funds. Another honourable instance we omitted to mention was, in the case of the transit of 1761, when Professor Winthrop was sent, at the expense of the provincial government of Massachusetts, to St. John's, in Newfoundland, to observe it in that place. It is also necessary that this operation should not be omitted by us, as it is wholly passed over by Delambre, who does not mention even the observations, far less the important calculated results.

Maskelyne, the British Astronomer Royal, also calculated the parallax of the sun, as did De Sejour, in France. Although both these astronomers agreed upon $8.88''$, that quantity is less near the truth than the determination of the American philosophers, the solar parallax being now admitted to lie between $8.5''$ and $8.6''$. Both calculations also are subsequent in date to those of Ewing and Williamson, and, as far as we can learn, to that of Smith.

The close of the seventeenth century, saw the erection and endowment of the two great observatories of Paris and Greenwich. The former was finished in 1671, and the elder Cassini called from Italy, to be placed as its director. This post descended to his son, grandson, and great grandson ; and this hereditary succession, imbued with the spirit and ideas of their pro-

genitor, defeated the views that had originally led to the construction of the observatory. Picard had urged its erection, for the purpose of establishing in it great murals, sectors, &c. instruments proper to determine the right ascensions and declinations of the heavenly bodies, refractions, parallaxes, and all the essential bases, on which true astronomy rests. Cassini and his family neglected all this, and devoted their whole attention to researches on the rotation of the planets, the formation and disappearance of their spots, the discovery of satellites, and other matters, curious beyond doubt, and not to be neglected in a great establishment, but secondary in real importance. It has hence been urged, that the observatory of Paris, was, for the one hundred and forty years it continued under the direction of the Cassini family, entirely useless to astronomy. This is not absolutely true, and yet is but little exaggerated, particularly when we find, that the little they added to the common stock, was more than counterbalanced by several gross errors, of which they were the authors and advocates.

It was far otherwise with the observatory of Greenwich. This, which Charles II., probably from no better motive than to imitate Louis XIV., caused to be built in 1671, was, by a fortunate choice, placed under the direction of Flamstead. In the year 1676, he entered upon the duties of his appointment, with instruments principally provided at his own expense, and that of a zealous patron of science, Jones Moore. His first observations were made in the manner of Tycho and Hevelius, but he speedily adopted that of Picard. For this purpose, he placed in the meridian a mural arc, of about 120° , by means of which, and the passages over a single vertical wire in its telescopic sight, he obtained the right ascensions and declinations. At this task he laboured assiduously for upwards of forty years, and after the close of the first thirty, gave to the world his *Historia Celestis*, and his catalogue of the fixed stars. This catalogue contains three thousand fixed stars, and was universally employed by astronomers, until the close of the eighteenth century. He also published a celestial atlas, an important and valuable work.

He was succeeded as astronomer royal by Halley, who had at one time assisted in his observations, and had afterwards proceeded to St. Helena, for the purpose of making a catalogue of the southern constellations. On his return, he had applied himself to the theory of comets, which he first successfully solved. Newton had, indeed, in his principia, indicated the method of correcting the trajectory of a comet, and it is cited by Olbers as the most simple and exact, that yet exists. Halley went farther, and proved that the comets were governed by the same laws as the planets; taking as an example that of 1680, he showed that it had described a path, not sensibly differing from a parabola, and in conformi-

ty with the great principle of areas. After improving the method of calculating the parabolic orbit, Halley next proceeds to show the probability, that they actually moved in re-entering orbits, like those of the planets, but of great eccentricity. He next shows the relation between the parabola, deduced from the observations, and the ellipse that would on this hypothesis be actually described. His method is then applied to the comet of 1682, for which he finds a period of seventy-five years, and of which he predicts the return for 1758. This comet did actually re-appear so near to the period prescribed, as to leave no doubt of the truth of his theory. Among the other comets included in his list, no other has since presented itself, nor did he predict any intermediate return, except of the comet of 1532 and 1661, for 1790. But a little before this last epoch, Mechain decided that these were not identical, and that therefore a return was not to be looked for. This work of Halley's, upon comets, is one of the most important of the advances ever made in astronomy; it connects those bodies with the planets, and late observations have shown many orbits of comparatively little eccentricity, and short periods, that form an intermediate link between the old planets and more conspicuous comets. On the death of Halley, in 1741, he was succeeded by Bradley. This astronomer had previously distinguished himself, as we have already stated, by the discovery of the aberration of the fixed stars, and the nutation of the earth's axis. Of these, he was not merely content to establish the laws, but also assigned the physical reasons.

In his method of observing, Bradley made considerable improvements. The meridian circle of Halley, was replaced by a transit made by Bird, of eight feet focus, and after it was set up, the right ascensions of the stars were observed wholly with it, instead of trusting, as had hitherto been done, to the passages, determined by the same instruments which measured the altitudes. The publication of his observations was delayed long after his death; and when they did at length appear, hardly fulfilled the high expectations to which his former success had given rise.

Bliss replaced Bradley as British Astronomer Royal, in 1762, but he held the office no longer than three years, and had no time to distinguish himself as an observer, although a few of his observations are appended to the volumes that contain Bradley's.

During the whole of the remainder of the eighteenth century, the observatory at Greenwich was under the direction of Maskelyne. During a space of forty-seven years, ending in 1811, he observed the heavens with an attention and care of which there are few instances. He had, for this purpose, instruments unquestionably superior to those of any of his contemporaries; the quad-

rants of Bird and Graham, the transit made for Bradley, and the sector with which the latter had discovered the aberration, were long unequalled in any observatory : but he, in addition, improved the mechanical part of their use. Before his day, the records of observations, as we have seen, remained unpublished, and of course inaccessible, frequently until their value had diminished or was altogether destroyed. In the foundation of observatories, much expense was uselessly wasted upon buildings ; proper instruments were obtained, although with great difficulty ; but that which was necessary to render them of real value, the promulgation of the observations, was neglected, and no funds assigned for this important purpose. Maskelyne was the first, who, by his own exertions, supplied this deficiency. He had influence enough with the council of the Royal Society, to obtain the publication of his observations in annual papers. When united, they form four quarto volumes ; and with those of Bradley, which saw the light in 1798 and 1805, they form a precious collection, to which astronomers will constantly refer. It is by their means that the astronomers of the continent of Europe have been enabled to bring to their present state of perfection, the tables of the sun, the moon, and the planets. Such is the value of this unique and important series of records, that, were the whole of the knowledge of the day to be at once obliterated, and these observations alone to be preserved, in them would be found every thing necessary to construct anew, the whole edifice of modern astronomy.

Besides forming the most important part of this valuable collection, he on one occasion quitted the observatory, in order to determine the deflection produced on the plumb line by the attraction of mountains.

The French academicians, while measuring a degree of the meridian in Paris, had first noticed this effect, but had been unable, in consequence of their ignorance both of the actual size and the density of the mountain, to draw from it any valuable practical inference. No mountain in Europe being comparable in bulk to Chimborazo, the investigation became more difficult. Maskelyne, after much search, fixed upon the mountain Schellion, in Scotland, as well suited for the purpose. The disadvantage of its comparative smallness, was obviated by the accuracy of his instruments, and the care with which the experiments were conducted. He observed altitudes of the same stars on the north and on the south sides of the mountain. He then measured trigonometrically the distance between the two places of observation, and thence deduced the sum of the deviations produced by the attractions in opposite directions, which he found to be $11^{\circ} 6'$. There remained the bulk and density of the mountain to be investigated. This was undertaken by Dr.

Hutton, and completed by Playfair. The density of the mountain was found to bear to that of the earth, the relation of 5 to 9; and the specific gravity of the mountain to be 2.75. A combination of these two results makes the mean density of the earth about five times as great as that of water.

We may here mention another attempt to determine the density of the earth, by Cavendish. This experiment was performed by means of an apparatus contrived by Mitchel, and improved by the former. The important parts of this instrument were similar in principle, to the balance of Torsion of Coulomb, which he had published an account of, and described as applicable to a variety of other purposes, although this seems to have escaped him. By measuring the effects of the mutual attraction of two masses of lead, and comparing it with that of the earth, he inferred a mean density for the latter of 5.48, as the average result of twenty-nine experiments.

On examining some of the calculations, an error has been found, by correcting which, the earth's density is reduced to 5.31. Thus, then, these two experiments, conducted on principles entirely different, concur in ascribing to the earth a mean density about five times as great as that of water; and their accordance is as great as can reasonably be expected, in so delicate and difficult a research. Hutton has since proposed, that the operation of Schehallion be repeated on the opposite sides of one of the great pyramids of Egypt, which, from their regular figure, the direction of their faces, and the homogeneous nature of their materials, are as well calculated for the purpose, as if they had actually been constructed for no other reason.

The observatory of Paris added, as we have already intimated, little or nothing to the stock of correct observations, on which to found astronomical tables, during the eighteenth century. No observations of the elder Cassini have ever seen the light. Lemonnier had sufficient influence to procure the printing of a few pages of his observations, and La Caille, by devoting himself to the drudgery of calculating some volumes of Ephemerides, obtained the funds necessary for publishing his; but his observations on the southern stars, made at the Cape of Good Hope, did not appear in print until after his death.

The greatest direct service that Maskelyne's position and pursuits enabled him to render to the active pursuits of men, was in the part he took in perfecting the means now almost solely used for the determination of longitudes at sea. These are:—that by distances of the moon from the sun or stars; and that by the chronometer.

The moon having the most rapid apparent motion of any of the celestial bodies, changes her place so quickly, as to appear at different distances from a fixed star or the sun, when observed

at the same apparent time, under two different meridians. Hence, if the distance between the moon and some other celestial body can be calculated for a certain instant at the principal or any other appropriate meridian, and if a similar distance be observed at some other place, the inference is, that the moment at which the same calculated distance would occur at the first meridian, has arrived. This time is one of the objects of the predictions of lunar tables ; on their perfection, then, the accuracy of the method will depend.

Maskelyne, in order to render this method of value, undertook to edit the tables of Mayer, and obtained for his widow, from the British government, a reward of two thousand pounds sterling, being the half of that offered for a complete solution of the problem of the longitude.

Newton had left the theory of the moon in a very imperfect state ; he had proceeded no farther than to a partial solution of the problem of the three bodies, in reference to the sun, moon, and earth. All inequalities in these motions, arising from the action of the other bodies in the system, were left out of view. Flamstead had made some attempts to improve the tables of Newton, and Halley had investigated the lunar theory, the weakest part of the astronomy of his day. But, in their researches, they made use of the results of observation alone, which is not of itself sufficient for the purpose. On the other hand, Euler, Clairaut, and D'Alembert, while they added much to the theory, paid but little attention to the coefficients deduced from observation. Hence, their tables were even less accurate than those which had preceded them ; but Mayer united both methods, taking the form of his arguments from theory, while the coefficients were taken from the records of observations. In this, he used principally, solar ellipses and occultations of the fixed stars.

The records of these phenomena, as they require for their observation no more than a telescope and a well regulated time-keeper, were more numerous than any others ; for hitherto the transits of the moon over the meridian, had been neglected. His tables were, therefore, far preferable to any of those of a prior date. In truth, both theory and observation are absolutely necessary in the research. The former will only give the coefficients in a partial manner, while from the latter, they may be deduced in full, provided it be itself exact. But, as uncertainty must still exist, in respect to the particular inequalities concerned in the observation, theory must now again be employed, and an accuracy, greater than observation alone will furnish, can thus be attained. The theory of Mayer was nearly complete, but the observations he employed, were not sufficiently numerous. Thus, therefore, his tables have been susceptible of improvement from time to time ; under the direction of Maskelyne, Mason, employing

twelve hundred observations of Bradley, added much to the accuracy of the tables; and more recently, Bouvard, Burg, and Burckhardt, by the aid of the theoretic researches of Laplace, and the recorded observations of the Greenwich observatory, have improved them still farther. At the present time, the greatest error of the lunar tables, cannot exceed 15". But, whatever be the merit of these successive labours, and of those which must be undertaken hereafter, it is but just to say, that none of these tables are entirely new, but are no more than the tables of Mayer, adapted more closely to the results of more numerous observations. These tables will, therefore, render for ever famous, the name of Mayer, to whom may be applied the verse of Ovid.

"Cum Sole et Luna semper Aratus erit."

The method of lunar observations, thus prepared for application by the tables of Mayer, and the corrections of Mason, was fitted for general use by the exertions of Maskelyne, who, in preparing the requisite tables, and publishing in the nautical almanac, annually, rules for the calculations by which the observed distances are freed from the effects of parallax and refraction, rendered a most important service to mariners. In these useful labours he justly prided himself, and was hence led, in addition to his laborious duties as an observer, to superintend with the utmost attention, the calculations and publication of that Ephemeris. This interest could not be felt by his successor, and hence, for some years after his death, the reputation of the nautical almanac declined, until the board of longitude of Great Britain, with great judgment, confided it to another hand, and left the Astronomer Royal to devote his whole attention to the direct duties of his office.

With the same zeal for the extension of the practical benefits of his science, he took great interest, and applied no small labour in examining the fitness of the chronometers, proposed by Harrison, for the determination of the longitude; and upon his report, the remaining part of the reward of four thousand pounds sterling, one half of which we have seen adjudged to the tables of Mayer, was paid to that ingenious mechanic.

Having already devoted so much space to the history of observatories, we shall dwell no longer on that part of the subject, but proceed to follow the course suggested by the mention of Harrison.

Huygens, in adapting the pendulum to the clock, had furnished astronomers with a measure of time, far more accurate than any before employed. Still, it was not absolutely perfect. Besides various mechanical defects in the clock itself, many of which have since been removed or obviated, the pendulum cannot be made of materials which are not subject to dilatation and con-

traction by changes of temperature. Hence arises a constant variation in the rate of the clock. Graham, in considering this subject, conceived, that were it possible to make the body of the pendulum of one metal, and the rod of another, in such proportion, that the expansion of the one upwards, should exactly counteract that of the other downwards, the centre of oscillation might, in the variation of the extreme distance between the ends of the pendulum, be retained in a constant position. The clock would thus be rendered isochronous under all varieties of temperature. In experiments on the solid metals, he found none that would answer his purpose; mercury, however, dilating more than any of them, was fitted to produce the desired effect, and by substituting a vase of that metal, supported from beneath by the rod of the pendulum, and thus supplying the place of the solid lens, he effected the compensation, and constructed what is called the *Mercurial Pendulum*. This is, perhaps, even at the present day, the best that can be used in a fixed observatory.

Harrison returned to the attempt to employ the solid metals; but abandoning the impracticable endeavour to make the lens of the pendulum of one, and the rod of another, he sought to compensate the latter alone. He succeeded in this, by a combination of bars of different metals, expanding and contracting in opposite directions. This compensation, although less perfect than that of Graham, is the most easy in its use, and particularly when the clock is not permanently fixed at a single place, but occasionally carried and set up at others.

A time-keeper, regulated by a pendulum, does not, however, go during the time of its removal from place to place, and is stopped by the motion of a vessel; neither is its rate the same in different latitudes. Hence it is useless, when we wish to convey the time of a given place to another, for the purpose of determining longitude, by the difference of apparent time at the two places. To such purposes, a watch, or time-keeper, regulated by a balance, is alone applicable. But this, like the clock, is affected in its rate, by variations of temperature changing the diameter of its balance, and the tension of the spring by which that regulator reacts upon the train of wheels. A remedy for this, was found by Harrison, who applied the same principle he had used in his gridiron-pendulum, to a curb acting upon the balance spring. Other mechanics have made the balance itself of two metals; cutting the circumference into several arcs, whose curvations change with changes of heat, and thus tend to alter the position of the centre of gyration of the wheel, as much as the dilatation or the contraction of the radii tends to move that point in an opposite direction. Even before the close of the eighteenth century, such instruments had attained a high degree

of accuracy, and have recently been still farther improved ; so much so, indeed, that little more is left to be desired.

The improvement of instruments for observation, during the eighteenth century, was not less than that effected in time-keeping. We have spoken of the invention of the telescope, its proposed application to instruments for the measure of angles, by Picard, and its actual use by Roëmer and Flamstead. Still, it had many inherent imperfections. Constructed of spherical lenses, it was not capable of making a perfect image, and was, besides, affected by the unequal refrangibility of the rays of light. Before the time of Newton, a remedy had been sought for these defects, by increasing the length of the telescope, until it became too unwieldy to be managed ; but on his discovery of the different refraction of the rays of light, it became obvious that this increased length was insufficient of itself. He therefore abandoned the attempt to improve refracting instruments, and pointed out the principle of the reflecting telescope. This received various successive improvements, until in the hands of Herschel it became the means of most important discoveries.

Newton had, however, in his experiments on refracting substances, been led into an error, when he inferred, that the refractive and dispersive powers of different transparent substances, always followed the same law. A striking proof to the contrary exists, in the structure of the eyes of animals ; and an analogous, artificial combination was sought, by which, while the power of convergence should be retained, that of dispersion might be counteracted. Euler pursued this investigation, by mathematical methods alone, and was not successful ; but Dollond, an English maker of philosophical instruments, discovered experimentally, a combination of glasses that answered the purpose. Some years before his time, an attempt had been made, and had succeeded, to produce a similar result, by the union of a solid, with a transparent liquid ; but it had never come into general use, and was forgotten, until recalled to memory, by the improvement of Dollond. Since his day, telescopes of high power, yet of no great length, and entirely free from the chromatic aberration, have been within the reach of astronomers, not only for the mere view of the heavenly bodies, but set up as transits, and forming the sights of instruments for the measurement of angles.

The graduation of instruments for the measurement of angles, was, during the whole of the eighteenth century, receiving improvements. That of great instruments for fixed observatories, is performed originally, and *de novo*, in each case, by the aid of proper geometrical methods and apparatus. In the successive hands of Graham, Bird, Ramsden, and the two Troughtons, this branch of the art has reached a very high degree of perfection. It is, however, too expensive, and requires too high a degree

both of theoretic knowledge and practical skill, to be applied to the construction of the more usual instruments employed in practical astronomy. Hence, in the early part of the century, such were either too expensive for common use, or so imperfect as to be of little value. Ramsden, however, invented an instrument, which, if once accurately constructed, can be applied to transfer to the limb of any circle whatsoever, if only less in radius than itself, divisions as accurate as its own. This method of Ramsden, is now used in the construction of all instruments except great murals, and has tended, in a high degree, to the promotion of practical astronomy, by facilitating the fabrication of instruments, and reducing them to a lower price.

The astronomical quadrant, was originally used, as we have seen, by Ptolemy. It was the most important graduated instrument of his successors, and finally, in the hands of Flamsteed, had superseded all others, in fixed observatories. Two quadrants, one by Graham, and the other by Bird, suspended upon the same wall, and turned to the two opposite arcs of the meridian, had been successively used by Bradley and Maskelyne. Until towards the very close of the eighteenth century, the observations of Greenwich, were so superior, both from the quality of the instruments, and the attention of the astronomers, as to be looked up to as models of accuracy in every possible respect. When, however, observations began to be multiplied, by men of equal skill and accuracy, with instruments of equal, or even greater nicety of structure and division, discrepancies began to be noted, which it was finally discovered could only arise from differences in the instruments themselves. No sooner were these thus shown to exist, than theory pointed out physical causes of error in the quadrants, to which they might be ascribed.

However accurately and carefully an arc of a circle may be graduated; the very nature of the materials, and the imperfection of workmanship, together with the fact that the divisions cannot be strict mathematical lines, will render the spaces unequal among themselves. When a heavy instrument is suspended upon a wall, its own weight will tend to change its figure, however strongly it may be braced, and thus a new cause of error is introduced, for the arc will be no longer circular. The alternations of temperature acting upon the braces, and upon the arc, will cause a third set of errors; and these last will be constantly varying. Finally, the telescope cannot be placed so as to move with absolute certainty around the centre of the arc; and thus, did even no other source of error exist, the observed angle would differ from that cut off upon the graduated limb.

These causes of error, existing in the very nature of the materials and of the workmanship, it became necessary, so soon as the accuracy of observation was so far improved as to cause them

to interfere with that of the result, to seek a remedy. This has been found in the substitution of the entire circle for a quadrantal arc. The observations of Roëmer had been performed with such an instrument ; and it is probable, that had his records been preserved, the error and the remedy would have long before been detected.

Ramsden, being employed to make an instrument for the observatory at Palermo, since rendered illustrious, by its astronomer Piazzzi, was the first, in recent times, to construct a great circle for fixed observations. They have finally entirely superseded the quadrant ; but their introduction into other observatories belongs to the history of the astronomy of our own age.

In a circular instrument, the angle may be read upon various parts of the limb, each unequally affected by the several causes of error of division, and change of figure. If their sum include the whole circle, the sum of the errors is 0. The error of eccentricity is met by a mathematical property of the circle, and the result is, therefore, absolutely correct, so far as this is concerned.

The circle was introduced as a portable instrument, before it came into use as a mural. When thus applied, it is made to fulfil a condition originally proposed by the same Mayer, whom we have seen to have made such important improvements in the lunar tables. This consists in repeating the measure of an angle in succession, along the limb of the instrument, beginning each repetition at the point reached by the former measure. By this means, as a much greater arc will finally be passed over, and as the readings may be made on several points of the circle, all the usual causes of error are avoided, while, in addition, the smallest division of the instrument is subdivided as many times as the angle is repeated. Hence, a small, and even imperfect instrument, may be made to produce accuracy as great, or even greater, than the very largest and best of the old constructions. This principle of Mayer was introduced into astronomical instruments by Borda, and has tended most materially to the facility of multiplying accurate observations, in places where they would otherwise have been impossible. Nautical astronomy has been also much advanced by the introduction of instruments adapted to the peculiar circumstances of the place of observation, the deck of a vessel in motion. For such a purpose, the plumb-line and spirit-level are entirely useless. The principle of reflection, by which the image of an object might be brought into contact with another viewed directly, an operation whose certainty depends upon the direction of the places of mirrors, and the permanency of the objects viewed, but is independent of oscillations in the place of the spectator, was proposed by Newton ; but, it did not receive a shape in its application, which fitted it for practical

use, before the time of Godfrey, a resident of the city of Philadelphia. He has, however, been robbed of the glory of affixing his name to this noble invention, by the partisans of Hadley, who was certainly, if original, subsequent in the date of his discovery ; but, against whom, strong presumptive evidences of plagiarism have been urged.

This instrument may, by the aid of an artificial horizon, be used for taking altitudes on land, as well as at sea ; and from its portability and handiness, is, perhaps, with the exception of the chronometer, from which its use is inseparable, the most useful in practice of all that have been invented since the origin of astronomy. Placed in the plane of any object whatsoever, it measures their angular distance ; and thus is the all-important agent in determining the longitude by lunar distances, the most valuable present, perhaps, that science has ever given to the practical purposes of life.

We have thus briefly touched, and in a manner far more concise than their importance would demand, upon the most marked of the improvements made in astronomy during the eighteenth century. Many others remain, of less note, but still intrinsically valuable. For these, we must refer our readers to the work before us. In it, however, the author takes no notice of any additions made to astronomical science in this country. We have already stated, that there is every reason to consider Godfrey as the first inventor of the quadrant of reflexion. Of the usual reward of such a discovery, he has been deprived by the ascription of the name of a subsequent inventor, if not of a plagiarist ; so also have we mentioned, that, among the observations of the transit of Venus in 1769, those by Rittenhouse and other members of the American Philosophical Society, are entitled to a high place. The remaining labours of that distinguished American, of Ellicott and a few others, show that the patronage of government has alone been wanting to have enabled us to add our full share to the completion of the system of modern astronomy. It is, in truth, to be felt as a most severe reproach, that, although our government has now existed for nearly forty years in a state of perfect organization, and free from any internal disturbance, the state of public knowledge is so far behind that of the countries of Europe in this science, that the erection and endowment of a national observatory, have not been called for in so imperative a tone, that the representatives of the people could not have dared to refuse the requisition. It was one of the last acts of the administration of the enlightened Jefferson, to provide, and, as he thought, effectually, for a survey of the coast, and the creation of an observatory. The former was commenced with instruments, methods, and a skill of observation, that make the record of the little that was effected, rank before

any thing that has, even up to the present time, been performed in Europe.* The merit of this work has been acknowledged by the highest scientific authorities of France and England†; in our country alone, and we confess it with regret, it is unappreciated. The survey itself was hardly commenced, when it was suspended, partly owing to jealousies, and partly because when attacked by an opposition on the score of useless expenditure, it was abandoned by the administration, because it gave no patronage, and therefore, exerted no direct influence on political questions.

The present chief magistrate has seen the subject with other eyes; a national observatory was one of the earliest objects of public utility, recommended by him to the legislative bodies; but this recommendation has been hitherto attended with no good result. More recently, an enlightened representative‡ has again called up the subject of the survey of the coast; but this question, all-important to our character as a nation, is considered too trivial to be discussed, unless it could be made to bear upon the presidential question.

We fear the time will come, when some English critic, some Quarterly or Edinburgh reviewer, will exhibit to the world the mortifying fact, that for years after every petty German principality had its astronomic institution, supported at public expense; after the date of the establishment of an observatory in the convict land of Botany Bay,§ the people of the United States were so devoid of scientific intelligence, as to have made no provision for such a purpose. Rather than let this severe truth be urged as a reproach by foreigners, we prefer to disclose it ourselves, and to call upon those who guide the councils of the nation, to deliver us from the reproach.

Were it consistent with our present intention, we might refer to various subjects of geodesy, of physical and of practical astronomy, that have been illustrated by citizens of the United States, within the present century. To these, however, we may have an opportunity of recurring, on some future occasion.

The eighteenth century, is an age, that will ever be noted, in the annals of the world, as one in which science, of all descriptions, made a progress unexampled in the whole previous annals of the world. It is also, in the branch we have under consideration, that this progress has been the most marked. The theory of

* See Hassler's paper on the Survey of the Coast, in Transactions of American Philosophical Society, New Series, Vol. II.

† See Reviews of this work in Brande's Journal, and in the *Bulletin Universel of Férussac*.

‡ Mr. Verplanck.

§ A committee of the Royal Society is at present engaged in noticing the observations of 10,000 southern stars, made at Paramatta.

gravitation, proposed by Newton, at its opening, has been pursued, and applied during its lapse, to all the known existing combinations of bodies and motions ; and was, at its close, completed by Laplace. Proofs irrefragable and incontrovertible, have been obtained of the motion of the earth, both diurnal and annual. The dimensions of the solar system have been ascertained, and the sun and planets weighed as in a balance ; while the discovery of a new and distant planet, at the close of this age, has doubled the bounds of the kingdom of the sun.

Instruments, and methods of observation, have been so far improved, from a comparatively imperfect state, as to leave little to desire or look for hereafter.

The astronomers of the early part of the present century, have made some few, but important discoveries, that probably complete our knowledge of the district of creation, in which our earth is situated ; and those of the present day, like Alexander, seek for other worlds to conquer. Unlike him, however, they have no cause to weep, for in the regions of immeasurable space, there exist within our ken, bodies, and systems, and motions, that may, for ages to come, task their utmost exertions.

Of all the sciences, astronomy is the most elevated and sublime, as it is the most ancient, and the most perfect. It is susceptible of most numerous and important practical applications. It is the highest triumph of human intellect, and is calculated to give us the most exalted idea of the intelligence and penetration of man ; while on the other hand, this intelligence and penetration sink into insignificance, when compared with the wisdom and power of the great framer of the celestial machinery. It is, in truth, from astronomical studies, that we can more readily than from any other branch of human learning, reach a knowledge of the attributes of the Deity : of his goodness in the nice adaptation of all the parts of the Universe, to our own comfort and happiness ; of his wisdom in the perfect organization and machinery of the system, in which the most exact calculus can detect no flaw ; his power, in the enormous masses of the bodies of our system, and in the vast space it occupies ; a space, however, that dwindles to a point, when compared with the extent peopled by other planets, and other suns ; of eternal duration, in those motions that have for ages remained without change, and must so for ever remain, unless a power be interposed to stay them, equal to that which originally called them into existence.

ART. II.—*Lectures on Physiology, Zoology, and the Natural History of Man, delivered at the Royal College of Surgeons.* By WILLIAM LAWRENCE, F. R. S. *Professor of Anatomy and Surgery to the College, Assistant Surgeon to St. Bartholomew's Hospital, Surgeon to Bridewell and Bethlem Hospitals, and to the London Infirmary for Diseases of the Eye.* London: 1819. Salem, (Mass.) Foote & Brown: 1828. pp. 495.

WE have thought that a notice of the above work would not be unacceptable to our readers, considering the nature of the subjects of which it treats, and the high and well merited reputation of its author. The intimate connexion that necessarily exists, between the natural history of man, and almost every department of moral and natural science, furnishes a sufficient reason for its interest and importance. Manners, costume, and mode of living, nuptial and funeral ceremonies, laws, government and religion, language, style of thought and predominant passions, the influence of physical causes on the human form and character, the diversities and resemblances of different races, and in short, every moral and physical peculiarity, all come under the notice of the naturalist in this field of his researches, and cannot be more interesting to him, than to every general inquirer. Man himself, the most perfect and admirable of nature's works, is the subject of investigation, and certainly no new facts can be discovered, no new principles deduced, relative to his natural history, which will not carry additional light into all other inquiries which concern his character or his destiny. Though the importance of this branch of science be acknowledged in general terms, yet we believe it is but seldom that it has been rightly appreciated, or that its results have had that extensive application in which they might have been properly and advantageously employed. Few, we are constrained to say, are acquainted with the stores of curious and novel facts which it embraces, the great and interesting questions it involves, and the certainty and originality of its conclusions. The knowledge afforded us by the natural history of our species, has been too often considered as enclosed within the narrow pale of professional science, into which none but the initiated could enter, without being repulsed at the very threshold, by the chilling array of technical phraseology and unintelligible allusions. We confess, that the display of anatomical and other scientific detail, which so frequently meets the eye of the unpractised inquirer, has had its influence in deterring many from a more familiar acquaintance with a science attended with so many dry and repulsive accompaniments. This may be considered as a cause of the neglect of this branch of knowledge; but

instead of furnishing an excuse for it, it rather proves the necessity of that preliminary information, requisite to the proper understanding of any subject.

Ignorance of a science so rich in new and interesting results, and with such numerous and intimate relations, is inexcusable in any one engaged in enlarged philosophical inquiries relating to the moral or physical nature of man. To the zoologist, every fact in the natural history of our species must be doubly valuable, for it concerns that creature who stands at the head of the countless multitudes of the animal world, and whom nature has distinguished from his grovelling companions by every good and perfect gift. Our knowledge of the scale of being, generally, must in some measure be modified by our views of that species which occupies its highest and noblest rank. In him more than in any other being, the vital functions have been observed, and their relative importance estimated; the harmony and beauty of organization unfolded; the workings of passion and those higher phenomena of the mind studied and reduced to system, and the relations of the species, with surrounding objects, traced and understood. Not to the zoologist alone, who spends his peaceful existence in stuffing the skins of beasts or chasing the painted butterfly, and who confines his reasonings to the immediate objects of his observations, would we recommend an acquaintance with this subject, but even to those engaged in speculations higher, more refined, and, if you please, more closely connected with the interests of their species. We can assure the politician, that if he feels any curiosity to investigate the history, and trace the progress, of his science, he may see it in its most simple rudiments, and in various stages of advancement, in the laws and systems of polity of savage tribes. He will there find, unobscured by an infinity of complicated and conflicting interests, the germs of those deeply rooted principles, which bind together in harmony the discordant elements of civil society. And if the metaphysician ever hopes to obtain any successful results from his investigations of the mental phenomena, let him go where the human mind exists in its simplest conditions, where the passions burst forth spontaneous and unchecked by artificial restraints, and where the character is developed by the impulse of its own native energies. Let him see the mind, as it was in the beginning, unchanged by improvement or degradation, presenting in its bold rough outlines, varying in different races, and under different circumstances, an analysis ready made of those phenomena the most difficult of all others to analyze. Where can a particular passion be better studied than where it forms the peculiar features of the moral man, and exists free and unperverted by the influence of civilized life? It is where the elements of society remain in one rude chaotic mass, before the spirit of improvement has breath-

ed into it the breath of life, and reduced the shapeless materials to beauty and order, that the intellectual phenomena may be observed with the best chance of obtaining useful and interesting results. Thither, too, may the scholar go, and observe the first attempts of the mind, to embody its conceptions in speech or in permanent signs ; and tracing its progress from the first rude effusions, he may follow it through various degrees of perfection, to the ultimate efforts of mighty and creative genius. In the wild and infantile condition of the race, the theologian may behold the absorbing belief in supernatural and presiding existences, originating in those feelings of terror and awe, produced by the wonderful phenomena of the natural world, and trace it through its innumerable ramifications, till it comes to manifest its influence over every effort of the mind, and is felt through the whole range of human exertion.

It may indeed seem strange, that a science of such various and extensive bearings, should have received so little attention from general students; but the ignorance so often displayed on this subject, where better things were to be expected, is proof enough of the fact. How often is it that in discussions where a knowledge of the natural history of our species is involved, we find gross and ridiculous notions; in works, too, which have otherwise a very respectable character. How many, even at this day, among men of learning and general information, sincerely believe in the accounts of Robertson and Buffon, that the American aborigines are destitute of a beard, that the animals of the New World have degenerated from their primitive standard, or that the colour of the negro is produced by the action of a tropical sun. We would not have every one familiar with the form and dimensions of every cranium in Blumenbach's *Decades*, or acquainted with the physical peculiarities of every tribe on earth ; but there is here, as in all other departments of science, much knowledge, which ought to be common, and generally diffused. Enough should be known, to enable us to form correct views on the subject generally, and guard ourselves against gross errors and flimsy hypotheses. The most monstrous and ridiculous stories have ever been indebted for their currency to the imperfect knowledge existing among common minds, accompanied, as ignorance always is, by a proportionate share of credulity.

The progress of the natural history of man, it must be acknowledged, has not been commensurate with its importance ; and at this moment, it must be considered as far behind its kindred branches. One cause of this, no doubt, is the diversity and multiplicity of the inquiries which it involves, and the consequent incompetence, in a greater or less degree, of almost every individual observer. To give a perfect account of a newly discovered tribe, the observer must act in many capacities, and pos-

sess a variety of acquirements, rarely attained by a single individual. He must be an anatomist, in order that he may compare their external forms and proportions with those of other people already observed, and note their physical peculiarities,—a zoologist, to examine the inferior animals around them, and the relations that exist between them,—a physician, to study their diseases,—a botanist, to examine the plants used for their cure,—a *physicien*, (Gallicé) to ascertain the influence of the air, soil, water, temperature, &c. on their constitution,—a moralist, to investigate their moral peculiarities, and religious notions, and the influence of external circumstances in the formation of these,—a philologist, to form vocabularies of their language and trace its affinities,—and last, not least, a draughtsman, to sketch their habitations, implements of war and of domestic use, and scenes characteristic of their customs and mode of living. This great diversity of requisite qualifications will explain, in some degree, why, though discoveries have been pushed to the remotest corners of the earth, and new tribes brought to light from time to time, and repeatedly visited, so little has been gained to the natural history of our species. Voyages of this kind have generally been projected more for the purpose of discovering new lands, and increasing commercial resources, than of making accessions to science; and in accordance with such views, we find that the only men of science who have accompanied the marine expeditions ordered by the British government, have been an astronomer, and perhaps a solitary naturalist, who attempted to act in so many capacities, that he accomplished but little in any.

The French nation have been usually actuated by more enlarged views, and have richly furnished their expeditions with distinguished scientific men. We believe we may assert without exaggeration, that in the single voyage of one geographer and naturalist, more extensive and perfect collections were formed, and more valuable scientific information obtained, than had been accumulated by all the English voyages of discovery together. Other nations, however, are beginning to see the importance of similar measures, and have latterly taken care to supply a proportion of suitable men. Much praise is due to our own government, for furnishing with naturalists, the land expeditions which it has ordered for examining the vast unexplored regions of the North American continent. When we compare our present knowledge of the animal, vegetable, and mineral productions of our soil, with that which we possessed thirty years ago, and contemplate the sources of wealth that have thus been opened to us, we want no better evidence of the valuable services of such men, and of the necessity of multiplying these expeditions. The gentlemen who have explored the African and Asiatic continents, cannot be considered, after the most liberal allowances, to have

made the best use of their opportunities for adding to the natural history of their species. With a few honourable exceptions, their chief object seems to have been the correction and enlargement of our geographical knowledge, or, sometimes, to gratify an ill-directed spirit of adventure, while higher and more important objects have been neglected. The scientific reader, who consults their pages in the hope of finding useful and interesting information, too often meets with descriptions of hairbreadth escapes and perilous and amusing adventures. It is to such travellers, incapable of making observations themselves, and with too little knowledge to profit by those which fall in their way, that we are indebted for those erroneous and whimsical accounts which disgrace the books of travels of the last century, and which more modern and better qualified observers have not yet succeeded in entirely discrediting. This class of worthies deals largely in the strange and the marvellous, in stories of Patagonian giants and anthropophagi, and "men whose heads do grow beneath their shoulders." They are now hardly deserving of censure; their generation has gone by, and their fables would no longer be received with open ears and ready assent. But there is another class, entitled to the severest reprobation, not so numerous perhaps, but less harmless than the last, who, though not particularly interested in science themselves, are yet desirous that their labours should not be altogether useless to those who are. The observations of these men, are characteristically loose and indefinite; the subjects on which they touch, are discussed with little of that spirit of philosophical investigation, without which such discussions are worthless; and the hesitation and doubt with which we are obliged to receive their conclusions, render them almost nugatory. We rejoice, however, to see in modern travels a great improvement in this respect, and though we do not expect to find in every tourist a Peron or a Humboldt, we are more confident of meeting with a man of good judgment, who, if he makes no pretensions to natural science, at least has a due regard for truth and accuracy.

Professed naturalists themselves are, by no means, without their share of blame, as having contributed to bring about that neglect which the natural history of man has experienced. We ask any candid naturalist, whether we pass the limits of the strictest truth, when we assert, that there is not a class or order of beings in the whole animal or vegetable kingdom, which has not been the subject of closer observations, more enthusiastic study, deeper and more extensive research, than his own species. Infinitely more labour and expense have been bestowed, in illustrating even the insects of different countries, by elaborate treatises and costly engravings, than has ever been employed in representing the varieties of the human figure. We have splendid

engravings of the birds of Africa, and the insects of China ; but, who does not complain of our imperfect acquaintance with the human inhabitants of those countries? "No one has thought it worth while to bestow on a faithful delineation of the several varieties of man, one tenth of the labour and expense, that have been lavished again and again, on birds of Paradise, pigeons, parrots, humming birds, beetles, spiders, and many other such objects." A traveller will lead his readers from one end of an unexplored country to the other, crowding their minds with descriptions of all manner of fish, flesh, and fowl, dilating with raptures on the colours of a bird's plumage, and breaking into heroics on the discovery of a new plant ; while he leaves them as ignorant of the specimens of their own species, which he may have met with, as if the wild regions had never been visited by civilized man.

The common cause, no doubt, of the little attention that has been given to this subject by general students, is the want of suitable works. The most valuable, such as those of Blumenbach, Meiners, Lacepede, &c. are written in the Latin, or a foreign tongue, which, together with their expense and scarcity, renders them inaccessible to those who might otherwise be induced to consult them. A great deal of valuable and interesting information also, is scattered in various books of travels and voyages, which needs to be collected and properly arranged, before it can become generally known, and be useful. A work is evidently wanted, that shall contain the most important facts collected from all these sources, reduced to some convenient system, and expressed in plain vernacular language. To supply this deficiency in part, was the object of Mr. Lawrence, in the work now before us. His success in the undertaking, confirms the high reputation which he deservedly holds, as one of the most distinguished comparative anatomists of his country, an able surgeon, an elegant writer, and a popular lecturer. To say that he has accomplished his task with credit to himself, is sufficient praise with medical men, while the learning, research, sound and unprejudiced judgment, liberal and manly spirit of inquiry, which characterize the work, ensure its favourable reception with general readers.

About one hundred pages of the first part of the work, are occupied with general observations on physiology, zoology, and comparative anatomy, the connexion of these sciences with medicine, and the spirit in which scientific inquiries should be conducted. They are conveyed in elegant and forcible language, and will gratify that interest, which an illustration of the great principles and relations of the natural sciences must have to enlarged and inquiring minds. Mr. Lawrence has here taken occasion to bring forward and defend those peculiar notions which have ren-

dered his work obnoxious to many devout minds, and condemned its author to merciless castigation from the reviewers, and from some of his fellow lecturers. The worthy Christian Advocate, at Cambridge, whose duty it is to attend to such matters, has written a book against him, and Mr. Abernethy publicly accused him of propagating opinions detrimental to society. Now, common prudence should have dictated to Mr. Lawrence, as it has to many others, when touching on such delicate points, to compound with his conscience, and without raising a voice or making a struggle, drop into the general current ; or, perhaps, he would not have been alone if he had condemned what were his honest and sincere opinions. He has chosen neither the one nor the other of these courses ; but rather, to publish plainly and fearlessly his views, and leave the decision of the question whether they be correct or erroneous, along with all other questions of common interest, to the public voice. The very illiberal and testy spirit in which he was attacked, gave them at once a circulation as inappropriate as they were unexpected. If they have exerted any injurious tendency, and there can be but little doubt that they have, it was by thus operating on a class of minds for which they were never intended,* and who were consequently incapable of appreciating their nature and beauty. Such effects cannot be apprehended here, where perfect freedom of inquiry soon suffers all opinions to find their proper level in the public estimation, without any of those violent reactions of sentiment, so common under a shackled condition of the press. Mr. Lawrence's work will, for the most part, fall into the hands of mature and thinking men, whose principles are already formed, and too firmly established, to be shaken by a few pages of physiological argument ; and, if it do meet the attention of young and inexperienced minds, the opinions that they ultimately form, will stand a better chance of being correct and well-grounded.

Principles that are meant to be lasting, to give a direction to the mind and character in after life, are not to be taken up blindly on the credit of others, but are the fruits of long and severe investigations, amid the conflicting influences of early prejudices, and riper and wiser convictions. However correct they may be, if they are obtained without first discerning and struggling with the errors that surround them, they are like virtue that has never been assailed, faultless indeed, but frail ; they are liable to be blown away by every wind of doctrine. He who seeks for truth, without the courage to encounter error, never deserves to find it. If the existence of the mind, as a principle distinct from the body, be a physiological question, and their acknowledged influence upon each other, and mutual dependence for the well-being of both, seem to render it such, then its discussion was not only

excusable in Mr. Lawrence, but ought to find a place in all works of physiology. As long as the arguments are drawn from physiology, the province of the metaphysician is not invaded ; he is left to speculate on his entities and quiddities, as free and unmolested as ever. And when we recollect, that many honest and gifted men, who have been supports and ornaments of the church, have embraced and sincerely believed to be according to scripture, those very doctrines for which our author has been condemned ; the most pious mind need not be shocked, while the sure and precious hope remains of that glorious day, when this corruptible shall put on incorruptible, and this mortal shall be clothed with immortality. Much as our own views differ from those of Mr. Lawrence, we see no particular reason for abusing either him or his opinions. Physiologists have taken upon themselves to discuss these matters freely ; and, if they are to be put down, it must be by refuting their arguments, not by loading them with opprobrious epithets. Upon this point, we dismiss him with a word of friendly advice, to "go and sin no more."

In the first chapter of the work, we have an account of the anatomical characters which distinguish the monkey tribe from man, and prove at the same time, that they do not naturally go in the erect position. As this is a doctrine which some of the older naturalists strenuously denied, and which does not seem to be universally credited even now, it may be well simply to enumerate the arguments and observations upon which it is founded. They are—the narrowness of the pelvis, and the shortness of the neck of the thigh bone—preventing much extent and combination of motion in the lower limbs ; the smallness of the muscles of the pelvis and limbs—being too weak to maintain the body erect for any length of time ; the shortness of the heel bone diminishing the advantages that the muscles inserted into it have, in man, in raising the foot by acting on the long arm of a lever ; the circumstance, that the external margin of the foot rests on the ground ; that the plantaris muscle, which is very fleshy, instead of being inserted into the heel bone as in man, passes directly over it, and is inserted into the sole, an arrangement quite incompatible with the erect attitude, as the muscle must be compressed, and its action impeded, if the heel rested on the ground. Add to these obstacles the fact, that they have never been observed, in their native state, to assume the erect position, and that when they do, in consequence of instruction and discipline, they go with feeble and tottering steps ; and we think these considerations set this long disputed question satisfactorily at rest.

Naturalists are not yet generally agreed as to what are the distinctive characteristics of man, though plain matter of fact people, who have never been initiated into the secrets of zoolo-

gy, might think, that a creature of such various and remarkable qualities, could be distinguished by a multitude of peculiarities. Linnæus seems to have been sorely puzzled on this point. "Man," says he, "is neither a rock, nor a plant; he must therefore be an animal. He has more than one foot, he is not then a worm. He is not an insect, for he has no antennæ. He has no fins, of course he is not a fish. He is not a bird, for he has no feathers. What then is man? He is a quadruped, for he has four feet; the two before serve for touching, and the two behind serve for walking. He must therefore be a quadruped." Having thus settled the question so far to his satisfaction, his next object is to distinguish him from other quadrupeds, which, after many fruitless attempts, he gives up in despair. "It is true, that according to my principles of natural history, I could never distinguish man from the apes, for there are certain apes that have less hair than some men; apes also walk on two feet, and use their feet and hands like men. Besides, speech is not a distinctive character with me. I admit, in my method, only those characters which depend on number, figure, proportion, and situation. Therefore, man is an animal with four feet"*—and this is all the learned naturalist can make of him.

"The peculiar characteristics of man," says Mr. Lawrence, "appear to me so very strong, that I not only deem him a distinct species, but also put him in a separate order by himself. His physical and moral attributes place him at a much greater distance from all other orders of mammalia, than these are from each other respectively. The zoological statement of his principal character follows:

"ORDER, *bimanum* (two handed): GENUS, *homo*; the species single; with several varieties hereafter enumerated.

"Characters; erect stature; two hands; teeth approximated and of equal length; the inferior incisors perpendicular. Prominent chin; rational, endowed with speech; unarmed; defenceless."

The kind of diet for which man was destined by nature, whether animal, vegetable, or mixed, a question that has been considerably agitated by philosophers in all ages, and which does not seem to be yet settled, is considered by our author to be neither of these exclusively, but to be regulated by the external circumstances in which he is placed. The power of accommodation to every variety of climate, which the human constitution enjoys, is no less remarkable, in respect to the means of support. There are many places which, if they were designed ever to be inhabited by man, ought to furnish him with the means of living, which furnish only one of these three sorts of diet; but we find that in every variety of climate, and other circumstances which he can endure, the kind of food most suitable under them is produced. Amid the gloomy and chilling scenes of a polar region, where the resources of vegetable life are frozen up through

* *Fauna Suecia. Præf.*

a great portion of the year, human existence must be supported on such animals as can be easily procured from the shores and waters. The seal and whale constitute the whole dependence of the Greenlander, Samoiede, and Eskimaux, and are exactly suited to their circumstances ; for different food would be incompatible with the healthy condition of their functions. In very high latitudes, where the vital energies retire to the central organs, a great degree of stimulus and activity is absolutely requisite, in order to support the system against the debilitating and stupifying effects of extreme cold. In tropical regions, on the contrary, where the energies of the system are exhausted by the most trifling exertion, the most simple and least stimulating articles of food alone are consistent with health and enjoyment. The natives of temperate climates, in the same manner, are urged to a mixed diet, as well by the necessities of their constitutions, as by the invitation of nature, which so profusely spreads before them the bounties of the animal and vegetable world. That an animal diet is calculated to render men strong and courageous, according to the common notion, is entirely disproved by facts. Those northern tribes, whom we mentioned as living exclusively on animal food, are remarkably weak and timid, while the converse of the proposition appears equally true, if we regard the simple fact, that a few Europeans have long held in bondage the vegetable-eating millions of the east. In other instances, however, the influence of a vegetable diet on the physical and intellectual qualities, seems to be of an opposite nature. The South Sea Islanders, who are remarkable for bodily strength, of which some extraordinary instances are related, eat very little animal food. The negroes, whose physical powers are not inferior to those of any other people, are confined for the most part to vegetable diet, and such seems to have been the nourishment of the Greeks and Romans, in their earliest periods, when they were eminent for hardihood and bravery.

Comparing the structure of the internal organs in man, with those of the inferior animals, physiologists have lately inclined to the conclusion, that instead of being naturally either a carnivorous, or vegetable-eating animal, he holds a middle rank, and thrives best on a mixed diet—thus settling the question by arguments, drawn indeed from the best possible sources—the indications afforded by organization. But, setting aside these results, which do not seem to be fairly deducible from such an examination, Mr. Lawrence compares the digestive organs in man, with those of the apes, which most nearly resemble him of all animals, in the rest of their structure, and finds the same resemblance existing here. Now, the apes, so far as we are acquainted with them, are herbivorous, and we might conclude that man was the same, were we certain that the nature of their diet did

not, in some measure, depend on external circumstances, since they are all natives of tropical climates; as well as on their organization. But however this may be, there is one circumstance in which man differs from the apes; that extraordinary power of his constitution, which has rendered such a vast variety of climate compatible with his health and enjoyment, effects the same in regard to his food.

Our author's views of the "causes of the varieties of the human species," in which he, for the most part, follows Pritchard, may be understood from the following conclusions which he arrives at through a multitude of facts, and after many ingenious inquiries.

"1st. That the differences of physical organization, and of moral and intellectual qualities, which characterize the several races of our species, are analogous in kind and degree to those which distinguish the breeds of domestic animals, and must therefore be accounted for on the same principles.

"2dly. That they are produced in both instances, as native or congenital varieties, and these transmitted to the offspring in hereditary succession.

"3dly. That, of the circumstances which favour this production of varieties in the animal kingdom, the most powerful is, the state of domestication.

"4thly. That external or adventitious causes, such as climate, situation, food, way of life, have considerable effect in altering the constitution of man and animals; but that this effect, as well as that of art or accident, is confined to the individual, not being transmitted by generation, and therefore, not affecting the race.

"5thly. That the human species, therefore, like that of the cow, sheep, horse, and pig, and others, is single, and that all the differences which it exhibits, are to be regarded merely as varieties."

Though, to our minds, Mr. Lawrence does not satisfactorily establish these positions, yet his views accord infinitely better with all known facts and analogies, and are more philosophical in themselves, than those generally entertained on this subject. In referring the production of varieties in the race, to the effects of climate, mode of living, &c., writers have given to these agents a stretch of power, the proof of whose existence must be derived from some other source, surely, than well observed facts and logical reasonings on them. There cannot be found, in the whole compass of natural science, a question, in the discussion of which, so many false facts have been advanced, and so much exaggeration and distortion of what is really true practised, as of that of the influence of physical causes on the human constitution. When we come, now, with unprejudiced minds, to go over the same ground, and examine the same facts, which must have been examined again and again by former inquirers, it appears utterly unaccountable, how such implicit confidence in this doctrine, should have ever prevailed. They must have known, that in the continent of New Holland, even in its most southern extremity, there are found, men with blacker skins than any in the hottest regions of Africa; that the Eskimaux, Greenlanders, &c., who live in very high latitudes, are tawny, and some of them even

blacker than most Africans; and that the whole of the new world, which must possess some regions of similar temperature with those inhabited by blacks in the old world, does not contain a single black race. It appears satisfactorily enough to us, that the old position so often reiterated, that the blackest races are found between the tropics, and that the complexion becomes lighter as we approach the poles, is disproved by the most cursory examination of the facts. While some of the most important principles in zoology were yet unknown or imperfectly understood, it is not strange that colour, as being the most conspicuous peculiarity in the different races, obtained that share of attention which it deserved, to the exclusion, however, of other peculiarities infinitely more worthy to be relied upon, because connected with parts of the system less liable to variation. In zoology, as in other sciences, the most important, but less prominent objects of notice, have been seldom seized upon, till experience has proved the insufficiency of those more readily presented to view. The wonder is not, that the older writers regarded a black skin as more worthy of notice, and more unaccountable than a flattened cranium or projecting jaws; but, that in the present state of the science, when it is marked by more enlarged and philosophical views, any weight should be attached to the speculations and theories which grew out of such narrow considerations. Having explained the diversities of complexion by a reference to the influence of climate, it required but very little extension of the principle, to refer other peculiarities of organization, of less consequence, as they appeared, to the same cause. Now, allowing the most unbounded power in climate to change the complexion, it is far from being so plain, that it has given rise to the differences in the physical conformation of our races. True, the changes and degenerations, which some of the inferior animals have experienced, may be safely ascribed, perhaps, to such causes; but we can perceive no analogy between the two cases. The latter, we know, has happened; because it has occurred in our own times, and we have seen it. But neither we, nor any one else, have ever seen a single feature in the human structure, effaced or contracted, which could be referred to this cause. In order that there should be any analogy between the cases, changes in the human organization should be produced with the same facility as in that of other animals.

The action of solar heat on the body, seems only to deepen the colour of the epidermis; a change which is never communicated to the offspring, but soon disappears when the individual removes to a colder climate; for it is a fact of every day's observation, that the natives of temperate climates, who have contracted a brown shade by a residence in tropical regions, regain their original complexion after their return home. The children of the Moors and

Turks are as fair as those of the French or English. We confidently challenge the advocates of the old theory, to advance a single fact that fairly proves the power of climate in changing our physical conformation, while there are numerous unexceptionable facts which prove the contrary. The Jews have been scattered over the face of the whole earth, and though their complexion has suffered various changes, their national physiognomy is as distinct and characteristic as when they dwelt in the holy city. "Among us," says Volney, "a lapse of nine hundred years has not effaced the discriminating marks which distinguished the inhabitants of Gaul from the northern invaders, who, under Charles the Gross, settled themselves in our richest provinces. Travellers who go from Normandy to Denmark, observe with astonishment, the striking resemblance of the inhabitants of these two countries." The descendants of De Gama and Albuquerque, for more than three hundred years, have been scattered over the coast of Malabar, the plains of Bengal, and the Island of Macao; and "though they have forfeited all pretensions to the European complexion, their more stubborn features still claim a descent, and establish their claim to an ancestry, of which they are superlatively proud."* The Moors have lived in Africa since the seventh century, and even penetrated into the native countries of the negroes, yet we do not find that they have become more like these people, than were their Arabian progenitors. The negroes were introduced into America soon after its discovery, but they are not born, after so long a lapse of time, with hair less woolly, skins less black, or understanding less dull. Many other facts might be brought forward, but enough has been shown to prove the truth of our position. Our opponents are now upon the horns of rather an unpleasant dilemma, either honestly to give up their theory, or declare that climate has produced the effects in question in periods far beyond the reach of history or tradition. If, driven to the last extremity, in order to support their hypothesis, they feel inclined to the latter conclusion, let them consider the cloud of uncertainty and confusion which a fair extension of the principle would throw over the whole face of zoology. Once admit it, and they must go along with a celebrated French naturalist, whose profound and original investigations are strongly blended with the most fanciful hypotheses, and agree with him, "that the habit of keeping on all fours, during the greater part of the day, for the purpose of feeding, has given rise in herbivorous animals, to a thick horn which envelops the extremities of the toes, and as these are subjected to no motion, and serve no other purpose than to support the animal, the most of them are shortened, diminished, and in the end entirely obliterated;" that "in their fits of

* Johnson's *Influence of Tropical Climates*, &c.

rage, which, especially in the males, are frequent, the internal sensation produced thereby, determining the fluids more strongly towards the head, produces in some a horny secretion, and in others a horny blended with an osseous matter, which gives rise to solid protuberances, the origin of horns and antlers;" that "some of the carnivorous animals making frequent attempts to retract their long sharp claws, which greatly obstructed their progress when walking and running on rocky grounds, but which were necessary to enable them to seize and tear in pieces their prey, it gradually resulted, that particular sheaths were formed, into which they might draw back their claws when not in special use;" and in short, to sum up the whole doctrine, that the present races of animals have all descended from a few primitive forms, which have become thus changed through the influence of circumstances acting for a great length of time.* If we suppose—and it is only supposition at best—that the influence of external circumstances, at some very remote period of time, changed a negro into a white man, or vice versa, for any thing that we know to the contrary it may have changed an orang-utang into a man. It is only giving external circumstances an indefinite power to bring about all the metamorphoses, which, according to the author quoted above, have entirely altered the whole face of the animated creation.

Mr. Lawrence's theory is the result of enlarged views. It is better able to answer the question at issue than that vulgarly received; and it avoids the difficulty which seems to be as much dreaded by naturalists, and which in fact is at the bottom of the blind pertinacity with which the power of climate has been defended—the denial of the common origin of mankind. But almost the same objection may be urged against it which destroyed the other theory; that though very marked varieties are often produced in the domestic animals, accidentally or without any assignable cause, this does not prove the same in regard to the human races, for the simple reason that too few facts have been observed, to warrant the deduction of the general principle, and that consequently the analogy fails. It is making phenomena of common occurrence precisely analogous to others whose date is lost in the oblivion of past ages, and nothing similar to which now occurs, though the circumstances in which they are supposed to have occurred, continue the same. The domesticated state is considered as a necessary circumstance to the production of varieties in the inferior animals, since they are not observed to occur while they remain in their native savage state. Civilized man is pre-eminently a domesticated animal, if deviating from the state in which nature placed him, more widely than any other creature

* Lamarck, Philosophie Zoologique.

has done, can render him such; and yet we see none of those strange changes of organization so common with our domestic animals. If the varieties in the human race have been produced in the domestic or civilized state, there is no conceivable reason why they should not occur now, while the modifying influence of this state must be constantly increasing.

Mr. Lawrence, indeed, has brought forward two facts, and but two, which bear directly and positively upon this point, illustrative of this theory. Though willing to give them all the weight which they deserve, we do not feel warranted, in a science like zoology, in deducing any general principle merely from two insulated phenomena. It is well known, that among the African and copper coloured races, individuals are occasionally born entirely white, who, among the English and Spanish, have received the appellation of Albinos.

"That singular description of human beings called Albinos, possess a skin of a peculiar reddish, or an unnatural white tint, with corresponding yellowish white or milk white hair, and red, or at least, very light blue or grey eyes. The cutaneous organ has sometimes a roughness which has been construed as an approach to a degree of lepra. The hair of all parts of the body, is unnaturally white and soft; it has not the snowy whiteness of old age, nor the elegant light yellow or flaxen appearance of the fair haired (*Blondins*) German variety; but it is compared to that of milk, or cream, or of a white horse. The eye-brows, eye-lashes, beard, the hair of other parts, and often a soft down covering the whole body, are of the same colour. The iris is of a pale rose colour, and the pupil intensely red; these parts, in short, are exactly similar to the corresponding ones in white rabbits and ferrets.

"The characters of the Albino arise from a deficiency of the colouring principle common to the skin, hair, and eyes. Thus, the former has the hue which its cellular and vascular contexture produces. The hair is reduced to its simple organic groundwork; and in the eyes, which are entirely destitute of pigmentum, the colour of the iris depends on the fine vessels which are so numerous in its composition; and that of the pupil, on the still greater numbers of capillaries, which almost entirely form the choroid membrane. The close connexion of these parts, in respect to their colour, is evidenced by the fact, that neither is ever separately affected. The state of the eyes is the principal source of inconvenience. The absence of the black pigment, which has the important office of absorbing superfluous portions of light, renders the eye preternaturally sensible of this stimulus. Strong lights affect the organ painfully; even the glare of day is too much. Hence, the eye-lids are more or less closed; the eyes are described as weak and tender, and as sometimes affected with chronic lippitude. These evils are balanced, in some measure, by superior vision in twilight, dusk, or imperfect darkness."

They are sometimes found two or three in the same family. When matched with common negroes, the offspring is generally black; sometimes white. No cases are noticed, where they were matched together. Now what are we to conclude from the history of these people? Are we to consider it as a proof of a disposition in the human constitution to deviate from its type, that the white races have also been produced in consequence of this disposition? This deviation from the primitive, it must be recollected, is always of the same kind: the offspring of the negro,

when it loses the colour of its parents, always, without exception, has that of the Albino. No instance has been known of their being of the colour of the mulatto, or European ; neither does this phenomenon of the Albinos render it a whit more probable that such an occurrence can take place. This loss of the colouring matter is not peculiar to the human race, but is often observed with the inferior animals, such as the rabbit, ferret, mouse, squirrel, rat, mole, weasel, camel, buffalo, beaver, crow, blackbird, and many others. It is an organic deficiency, and is as evidently a monstrosity as the want of a finger or a toe.

The other fact we would notice, as illustrating Mr. Lawrence's theory, is that of the English family of *porcupine men*, who derived that name from the greater part of their body being covered by hard, dark-coloured excrescences, of a horny nature.

"It was not easy," says Mr. Machin, in his description of Edward Lambert, a boy fourteen years old, the first of this family, "to think of any sort of skin or natural integument that exactly resembled it. Some compared it to the bark of a tree ; others thought it looked like a seal skin ; others like the skin of an elephant, or the skin about the legs of the rhinoceros ; some took it to be like a great wart or number of warts uniting and overspreading the whole body. The bristly parts, which were chiefly about the belly and flanks, looked and rustled like the quills of a hedge-hog, shorn off within an inch of the skin."*

He had six children and two grand children, all with the same rugged covering ; the latter were exhibited about thirty years ago in Germany. "Let us suppose that the porcupine family had been exiled from human society, and been obliged to take up their abode in some solitary spot or desert island. By matching with each other, a race would have been produced more widely different from us in external appearance than the negro. If they had been discovered at some remote period, our philosophers would have explained to us how the soil, air, climate, had produced so strange an organization ; or would have demonstrated that they must have sprung from an originally different race ; for who would acknowledge such bristly beings for brothers ?"

With all deference for Mr. Lawrence, we confess that we have not the same confidence, that, had the porcupine family been banished to some secluded spot, the race would have been continued. The first individual presenting this peculiarity, was born in 1717 ; it was continued to the third generation, and after that we hear no more of it. It is altogether an anomalous and insulated fact, and for that reason unfit to be made the basis of such a general principle, as he would wish to establish. It is just as probable that the disposition to this singular peculiarity would have been

* Philosophical Transactions, No. 424.

gradually exhausted, and the integuments have assumed their natural appearance. At any rate, are we, upon the strength of this single fact, to draw the sweeping inference, that all the varieties of our race have been the result of accident?

If, then, neither the influence of climate, nor accidents of generation, appear competent to have produced the effects in question, to what other causes shall we refer them? Or if no sufficient causes can be found, are we to believe that varieties of form, features, and complexion, have always existed, and that the human race is composed of various species sprung from different stocks? Of this problem, undoubtedly the most difficult in the whole range of zoology—and we would have it distinctly understood, that it is only as a zoological question that we intend to discuss it at present—a satisfactory solution has never been offered. So entirely destitute are we of facts bearing directly on the point, and so indefinite and uncertain must be the application of all general principles and analogies, that whatever positive conclusions we may have adopted, they must have been formed by those imperceptible operations of the judgment, which may carry conviction to our own minds, but can never determine the opinions of others. In the few remarks which we have to make on this subject, we shall examine the strength of the evidence generally brought forward on the question, whether the human race be composed of different species.

Let us then first inquire what evidence is afforded us by the differences in the race, of an anatomical or physiological character. If the principle laid down by Buffon and Hunter be received in its fullest extent, that all animals which propagate together, and produce a prolific offspring, belong to the same species, the question is obviously set at rest for ever. Generally, we acknowledge this principle to be correct; but as there are many undeniable exceptions to it, the force of its application is destroyed in any contested case, and it is now abandoned by zoologists, as not affording a certain criterion of species. The only criterion of specific difference, that we now acknowledge, is the presence of permanent and distinctive characteristics. The object of our inquiry now is, what may be justly considered as characteristics of this kind, and whether they may be found in the human race. Specific characteristics, as they are used merely to distinguish particular groups of objects from other groups to which they possess more or less similarity, must necessarily differ in their nature, as that of the objects themselves varies. As characteristics which in some instances would be sufficient to constitute the object one of a different genus, would not in others indicate any thing more than a difference of species. The farther we descend in the animal scale, the more minute and obscure do distinctive characteristics become, till those which in the higher classes would be regarded as

unimportant and of no account, in the lowest are made the ground of specific and even of generic difference. The same, likewise, seems to be the case as we approach the other extremity of the scale, where nature has placed her most perfect productions. A difference in the number and form of the teeth, is made the most common criterion of generic distinction among the mammiferous animals, while the species of the same genus among the fish and reptiles, vary indefinitely in this respect. This shows that no reasonable objection can be urged against the sufficiency of certain characteristics, or combinations of them, to constitute a specific difference in the human race, especially while the same are used without hesitation, to distinguish the species of animals which most nearly resemble us.

No distinctive characteristic is more frequently used by zoologists, in their descriptions of the mammiferous animals, than that drawn from colour; and we do not doubt that it is as permanent as any other part or property of their structure. We have the testimony of all past experience, that, in the human races, the colour, or to speak more definitely, the seat of colour, the *rete mucosum*, has suffered no change; why not, therefore, give it the same distinctive importance which it has in other animals? The same may be said of stature, form of the head, proportion of the limbs, &c.: and there is in zoology no reason why a human race, which differs from all the rest in these peculiarities, should not be considered specifically different from all the rest. A difference of a few shades of colour, a few inches in stature and length of the hair, make up the specific differences of one half of the genera of mammiferous animals. Let any naturalist compare the distinctions between two well marked varieties of man, with those which he observes between some of the species of the felis genus, or monkey tribe, and then satisfy himself if he can, why one constitute a variety, and the other a species. If specific differences are to be made in our race, it must be from this general summary of differences, and not from any particular characteristics. We doubt, whether there be any particular characteristics, that are permanent, well marked, and peculiar to any one race, or number of races. Desmoulins* mentions the perforation of the olecranon fossa of the humerus as an organic peculiarity of the Hottentots, and Guanches, the aboriginal inhabitants of the Canary islands, and makes use of it in forming the distinctive characters of these races. Upon how many skeletons he has verified this fact, he does not inform us; but the number must necessarily have been small. We question, however, whether it be more permanent or peculiar, than many other characteristics. We have lately witnessed, ourselves, in two instances, the same

* *Des Races Humaines. Hist. Nat. Paris, 1826.*

structure in the skeleton of the negro. However easy it may be, to observe distinct, well marked differences between the particular specimens of the human race, we find the case very different, when we come to make the division, and reduce all the specimens to one or the other of them. Whatever number we may fix upon, and however well we may distinguish them, we see them, after all our attempts, constantly running into each other by every shade of gradation. The conclusion, then, to which our inquiry leads us, is, that though differences exist in the human race, which, in other tribes of animals, would be made the ground of specific distinction, yet so impossible is it to reduce them to any order or arrangement, that we are not justified in denying the unity of the species.

Before we quit this subject, we would give a passing notice to a source, from which evidence has been collected, for the purpose of determining the origin of particular races, since it appears to us, there is generally attached to it a degree of importance to which it has no legitimate claims. The most that can be proved by the strongest analogies that have ever been traced between the languages of people, of whose past history we are ignorant, is the fact of a communication simply, not of a common origin. And we are not perfectly sure of this fact even, unless the analogies be numerous and striking, and the words found to be analogous designate common and familiar objects, or ideas of a local and conventional nature. Thus, we do not hesitate to believe, that Madagascar has been visited by Malays, when we observe the striking similarity in the name of the days of the week, and of the numerals, which cannot be regarded as accidental. We say, visited by them ; for such are the traces that a superior and a more advanced people leave behind them, which, had they originally peopled the island, we should expect to find a similarity between words that express the most familiar and earliest objects of the senses. A few miscellaneous analogies do not prove a common descent ; for, without noticing the fact, that many analogies arise from a natural disposition to make the sound resemble in some way or other the object designated, it is more probable that they are accidental, than that the conclusions are correct, to which they would conduct us. These analogies are often traced in the languages of people the most remote from each other, and between whom we find striking differences in physical conformation. The irreconcilable confusion of the results of philological researches, must effectually prevent us from making much use of them, in deciding upon the origin or connexions of different people. Thus, the origin of the aboriginal Americans, has been a famous hobby with philologists, divines, geographers, historians, &c., and it is curious to look back and observe the various and discordant re-

sults, to which their fancied analogies lead them, according as they received their bias from previous prejudices and turns of thinking. One saw in them the genuine descendants of the ten lost tribes ; another, the prolific progeny of a colony of Welshmen ; one traced them to the Phœnicians or Tyrians of old ; another to the northern Asiatics ; one derived them from the Chinese ; another from an obscure tribe in southern Africa ; while each and every one supported his theory by undoubted analogies of language. A circumstance which has been, and will long continue to be a serious obstacle to the certainty of philological researches, is the want of settled principles of orthography. The same sounds are expressed in writing very differently by different men, and when compared together by one ignorant of the fact, might be considered as very analogous to each other, but would hardly be supposed identical. It is difficult enough for the professed philologist, who has devoted labour and learning to the subject, to grope his way through the obscurity that hangs over all investigations of this nature ; and what shall we say of the picked up "vocabularies" of travellers, who, perhaps, were men of very good common sense, and competent to record what they saw, but utterly ignorant of the principles of language. Let some system of orthography be agreed on, and rude language examined and written according to its dictates, and then we may expect some sure and useful results.

In the chapter on "Forms of the Skull," Mr. Lawrence adverts to the physical character of the ancient Egyptians, and examines the opinion so often advanced, that this celebrated people were a race of negroes. The very different notions which are entertained on this subject, have undoubtedly arisen from the contradictory nature of the evidence, and the partial manner in which it has been examined—those who go only to the ancient historians and poets, and place implicit confidence in their testimony respecting their contemporaries, believing with them, that they were black skinned and woolly haired, while others, who are simple enough to prefer the testimony of their own senses to that of a few passages of doubtful meaning, recorded thousands of years ago, flatly deny them to have possessed any resemblance to the negro formation.

"The Caucasian races of Arabia, Syria, and the surrounding parts, must have found their way into this fertile and flourishing country : the Red Sea offers an easy medium of communication both with Arabia and India ; while the freest access exists on the south and west to the Negroes and Beolens of Africa. Hence, specimens of various races, may be naturally expected to occur among the mummies, and may have afforded models to the painter and sculptor. If, however, among the myriads of embalmed bodies, of the sculptured figures which cover the walls of temples and palaces, and of other works of art, we should meet with one or two of negro formation, are we thence to conclude that the original Egyptians were negroes ; or, that men of the latter race, pos-

essed those distinguished powers of knowledge and reflection, which the early history of this wonderful country compels us to assign to its ruling race? Ought we not rather to draw our conclusions from the most prevalent forms, those which are most numerous and abundant in the oldest specimens? If, among a profusion of mummies and figures, bearing the stamp of the Caucasian model, a few should occur with a little dash of the negro character, may we not suppose the individuals who furnished the pattern of the latter, to have been, in Egypt, as they have been every where, slaves to the race of nobler formation?"

In the tomb of Psammis, discovered by Belzoni, there is a representation of a triumphal procession, which completely establishes Mr. Lawrence's opinion. The first in this group are four red men with white kirtles, followed by a hawkheaded divinity, and are Egyptians, returning home, it should seem, under the protection of their national deity. Next come three different sets of prisoners, Jews, Persians, and Ethiopians, whose national physiognomies and complexions are so accurately retained, that of the Jews, the Quarterly Review remarks, they might be taken for the "portraits of those who, at this day, walk the streets of London."

Denon states, of the female mummies, that their hair was long, and that the character of the head was mostly in beautiful style; the head of one woman was as beautiful as those of Michael Angelo's Sybilles.

The heads engraved in the great French work, "*Description de l'Egypte*," are in the finest European form.

The testimony of Cuvier on this point, quoted by our author, is worthy of all acceptance.

"Now that we distinguish the several races by the bones of the head, and possess so many of the ancient Egyptian embalmed bodies, it is easy to prove, that whatever may have been the hue of their skin, they belonged to the same race with ourselves, that their cranium and brain were equally voluminous; in a word, that they formed no exception to that cruel law, which seems to have doomed to eternal inferiority, all the tribes of our species which are unfortunate enough to have a depressed and compressed cranium.

"I present the head of a mummy, that the academy may compare it to those of Europeans, Negroes, and Hottentots. It is detached from an entire skeleton, which I did not bring with me on account of its brittleness; but its comparison has furnished the same results. I have examined in Paris, and in the various collections of Europe, more than fifty heads of mummies, and not one amongst them presented the characters of the Negro or Hottentot."

The literary merits of the present work, are highly respectable; which those much conversant with the writings of anatomists, know to be no common praise. It ranks far above the compilations of White and Prichard, and may be considered as going far towards filling the void in the department of natural history, of which we complained in our prefatory remarks. The style, of which the following passage may serve as a specimen, is bold, nervous, and generally elegant, but disfigured by occasional vulgarisms, which, though proper enough in the lecture room, are unfit for the public eye.

* *Mémoires du Muséum d'Hist. Nat.* t. 3. p. 173.

"And here I take the opportunity of protesting in the strongest terms, in behalf of the interests of science, and of that free discussion, which is essential to its successful cultivation ; against the attempt to stifle impartial inquiry by an outcry of pernicious tendency ; and against perverting science and literature, which naturally tend to bring mankind acquainted with each other, to the anti-social purpose of inflaming and prolonging national prejudice and animosity. Letters have been called the tongue of the world ; and science may be regarded in the same light. They supply common objects of interest, in which the selfish unsocial feelings are not called into action, and thus they promote new friendships among nations. Through them, distant people become capable of conversing ; and losing, by degrees, the awkwardness of strangers, and the moroseness of suspicion, they learn to know and understand each other. Science, the partisan of no country, but the beneficent patroness of all, has liberally opened a temple where all may meet. She never inquires about the country or sect of those who seek admission ; she never allots a higher or a lower place from exaggerated national claims, or unfounded national antipathies. Her influence on the mind, like that of the sun on the chilled earth, has long been preparing it for higher cultivation, and further improvement. The philosopher of one country should not see his enemy in the philosopher of another : he should take his seat in the temple of science, and ask not who sits beside him. The savage notion of a natural enemy, should be banished from this sanctuary, where all, from whatever quarter, should be regarded as of one great family ; and, being engaged in pursuits calculated to increase the sum of human happiness, should never exercise intolerance towards each other, nor assume that right of arraigning the motives and designs of others, which belongs only to the Being who can penetrate the recesses of the human heart."

ART. III.—*Private Journal of a voyage to the Pacific Ocean, and residence at the Sandwich Islands, in the years 1822-1825.* By C. S. STEWART, late Missionary at the Sandwich Islands. New-York : John P. Haven, 1828. pp. 406.

THE widely diffused interest which the missionary exertion of the present day has excited, the respectability of the names engaged in its support, and the magnitude of the object to which it is directed, are, we think, sufficient reasons for devoting, occasionally, a portion of our pages to its passing occurrences. Every one of the numerous sects, into which Christendom is divided, is, in some form or other, committed to its accomplishment ; the learned and the ignorant are combining in its aid ; the rich and the poor are replenishing its treasures ; the object which it has in view has been distinctly announced ; the friends of missions have jointly and severally pledged themselves not to desist from their work, until paganism and idolatry shall have been banished from the earth, and every nation shall be universally illuminated with the light of revelation. It is claiming but little to say, that to the mere philosopher, the records of the success or failure of such an undertaking, must be as interesting, and as valuable, as the tariff question, or the poor laws ; the South American mining companies, or the last new novel.

And, even aside from the consideration of what has been done, or what may yet be accomplished, the observer of human nature will behold much in the present state of the Christian world, with reference to this subject, well deserving an attentive consideration. A very little reading directed to it, will enable him to trace the outline of one of those revolutions in public opinion, which is merely the precursor of a wide spread transformation of the manners of the age. Every one knows, that the first step towards a revolution in empire, is the clear and unquestionable demonstration of some simple and elementary truth, or the presenting of such truth in language that shall place it within the intellectual grasp of every class of the community. When once this has been done, its progress among a nation of readers is irresistible. The new principle may appear at first, in the splendid quarto; it soon finds its way into the stately octavo, and the humble duodecimo; and, before the generation to whom it was first announced, has passed away, it may be found the motto of a newspaper, or the ornament of a sign post. It has become incorporated with the intellectual fibre of the age. It is a part of every man's fundamental belief. No man thinks of proving it; for, having been once distinctly seen, it is, ever after, self evident; and no one can deny it, without subjecting himself to the charge of idiocy.

But, moral truth has always an important bearing upon practice, and, when a new moral principle has been fully developed, it will be at once discovered, that much which has been done in a previous age, has been done wrongly. The inconsistency of the new belief, with the old practice, becomes every day more glaring. Some spirit, more venturous than the rest, begins to suggest the carrying out of this generally received truth into the business and affairs of the every day world. Or, perhaps, some incidental occurrence, as in the case of John Hampden, leads to the trial of the question, whether the nation will act upon the principles they believe, or upon those they have long since exploded. Then commences what is, in the ordinary language of historians, termed a revolution, that period which is distinguished by battles and sieges, or which is recorded in constitutions and acts of parliament. And, when once the practice has been so altered as to conform to the theory, then, and not till then, is the revolution terminated.

That a change of this sort cannot be effected without very considerable opposition, no one who is at all acquainted with the present imperfect condition of human nature, could ever presume to expect. Monarchs are not the only men whom fear of change perplexes. There is a strong tendency in all of us, rather "to bear the ills we have, than fly to other that we know not of." And, even if the change be evidently for the better, and the

judgment be calmly and entirely completed, it requires a moral courage, not by any means universally possessed, to carry that judgment out into action.

“Between the acting of a dreadful thing
And the first motion, all the interim is
Like a phantasma or a hideous dream.
The genius and the mortal instruments
Are then in council ; and the state of man,
Like to a little kingdom, suffers then,
The nature of an insurrection.”

Now, all that portion of a community, and it is always a large one, in this state of *betweenity*, will be more or less at variance with the class of prompt and efficient actors from principle. They are afraid of being decidedly committed ; they cry out, not so fast, gentlemen ; they will allow the thing ought to be done, but it is impossible to find out any way of doing it which does not seem to them exceedingly ill timed and imprudent. They are the *Sir Oracles* of a party, who are sure to be absent when any thing is to be done. After, however, success shall have been triumphant, they are by no means unwilling to be very familiar with the leaders, to nod and wink as if deeply in the secret, and to have it fully understood that all this is owing to the profoundness of their wisdom, and the shrewdness of their sagacity.

This is, however, all internal. There are, as must be supposed, very many who will be, from interest, or prejudice, or ignorance, opposed to any thing which shall vary a hair's breadth the present state of the social relations. Their habits, and offices, and distinctions, and pleasures, are the creatures of the forms that now are. A certain man named Demetrius, a silversmith, who made silver shrines for Diana, when on a former occasion he called together the workmen of like occupation, spake the language of all this part of the community, from the year of our Lord 60 to the end of time. “*Sirs, ye know that by this craft we have our wealth.* Moreover, ye see and hear that, not only at Ephesus, but almost throughout all Asia, this Paul hath persuaded and turned away much people, saying that there be no gods which be made with hands, *so that not only this our craft is in danger to be set at nought*, but also that the temple of the great goddess Diana should be despised, and her magnificence should be destroyed, whom all Asia and the world worshippeth.” The effect of such an appeal has been always irresistible. The argument which cannot be answered by logic, may be overborne by clamour. Defeat is provoking, and rage is vociferous. “And, when they heard this, they were filled with wrath, and cried out, for the space of two hours, great is Diana of the Ephesians.”

But, *magna est veritas et prevalebit*. Opposition directs the minds of men to the question at issue. The paroxysm of rage itself, is succeeded by an interval of reflection, candid, not unfre-

quently, in the very proportion of its former excess. And, above all, death, the mighty queller, speaks peace to the turbulence of passion, and palsies the struggles of interest. A generation of men very quickly passes away, but truth is like her author, immortal; another race succeeds, whose prejudices are less inveterate, or whose interest may be subserved by yielding to the changing times, and thus, a new bias is given to the destinies of man.

Now, if we mistake not, very much of all this may be observed in the present state of the Christian world, when viewed in connexion with philanthropic effort. The principles on which the whole system of exertion is based, are very simple, and are not generally controverted. The command of the author of our religion is, thou shalt love thy neighbour as thyself. And he has taught us that *he* is our neighbour, whether fellow-citizen or stranger, whom it is in our power to render happier. This is the general principle; but it is in the New Testament carried out into more minute specifications. We are commanded to give proof of our discipleship, by feeding the hungry, clothing the naked, visiting the sick and in prison, the widow, the fatherless and the afflicted, and in a word, to employ every talent which has been intrusted to us, in some way or other, for the benefit of our fellows of the human race. And still more, as it is evident, that by far the greater part of the misery of this life is the immediate effect of moral pravity, the religion of Jesus Christ commands us to carry its precepts to every son of man under the face of the whole heaven. And yet again, the religion of the New Testament, viewing men in general under subjection to those passions which must of necessity be incompatible with the happiness of a moral creature in any state of being, and declaring the present life to be the only period of probation, urges its disciples to make known the way of salvation as the only mean of securing the everlasting well-being of their fellow immortals. The command on this subject is authoritative. Go ye into all the world, and preach the gospel to every creature. And, lest this should be misunderstood, every page of revelation contains, expressly or by implication, an assurance that effort in this direction, shall in the end be successful, and that this world, at length reclaimed from its vices, shall yet become in all its habitations the abode of innocence and peace.

That such are the precepts of our religion, has never, we believe, been controverted. It has not, however, been the case, until lately, that general effort has been made to carry them into practice. The Moravians, if we remember aright, in the midst of poverty, persecution, and exile, about the middle of the last century, set the first example of this sort of benevolence, to the Protestant denominations, and while they were every where the friends of the friendless, devoted themselves with their charac-

teristic ardour, to missions among the heathen. Other churches in succession have, in a greater or less degree, imitated their labours, and now, every sect is doing or professing to do something. The cause is, however, in that period of revolution in which it meets with opposition from within and from without.

And first, of those who, in the language of the prayer book, profess and call themselves Christians, there is, at present, a considerable class, the exercise of whose religion consists mainly in the direction of a cultivated and elegant taste to the truths of revelation. The precepts of the Saviour are, with them, things to be admired rather than practised; they praise benevolence in the abstract, but have no relish for it in the concrete; they love it in general, but they do not practise it in particular; forgetting that feeling was given to prompt us to action, they have so exclusively cultivated feeling that they do not act at all; they are delighted with a deed of fabulous philanthropy, but they would turn away in disgust from the realization of their own beau-ideal, unless, with the hardihood necessary to action, he united a soul tremblingly in unison with every vibration of their own high-wrought sympathies; they like to read of visiting sick beds, and are enchanted with the narrative of ignorant gratitude, but they would be grievously scandalized at such gross things *in propria persona*. Now, it is obvious that to all this class of persons, there can be nothing very attractive in Christian, and especially missionary benevolence. In the first place, it is all plain, literal, matter of fact business, and requires doing instead of imagining. And then it associates one with the vulgar and low bred, and brings us into positive contact with men and women utterly destitute of refinement.

Besides these, there is a large portion of very ambiguous friends of benevolence, even in the walks of rigid and highly lauded orthodoxy. They form a sect, that mean, in the exclusive sense of the term, to be justified by their faith. Works are their abhorrence. Their creed is, that if a man have passed through the correct noviciate, and believe *verbatim et punctuatim* the prescribed formula, and attend the proper routine of religious observances, the requirements of piety are exhausted. It never has occurred to them, that the command, *thou shalt not steal*, ever had reference to the quality of sugar or the length of a yard stick. As little do they think that the saying, *speaking every man truth to his neighbour*, was intended to prevent their selling goods to the best advantage. Little could it be expected, then, that such a man would interpret literally a command, *sell that ye have and give alms*. And still less, while entrenched behind his counter, he could look unmoved over the misery and vice every where about him, that he should be awakened to compassion by misery and vice, some ten thousand miles distant. And

hence this, as might be expected, is the man who has filled his mouth with brief and oracular arguments, against every sort of charity. If he is solicited for the distant operations of benevolence, his motto is, charity begins at home. If for something at hand, he has found that giving increases pauperism. If to aid in the instruction of the poor, they are happier in ignorance. And thus it is most palpably evident, that he has most conscientiously set his face against every investment of capital, which will not yield him a substantial and tangible dividend. And yet this man, strange as it may seem, holds himself forth as a disciple of him who went about doing good. He claims to be walking in the footsteps of martyrs and confessors.

Such is the opposition, which this cause at present encounters among the religionists of the age. There are also others, who, from theory,—for we will not abuse the word principle, by such an application,—are opposed to it. The anti-religionists of every class, unite in directing against it, with all the openness that the state of moral feeling in the community will allow, the whole artillery of sarcasm and invective. Both before and since the French Revolution, the men who do not believe there is a God, have always been virulent against those who believe there is one. The love of religious toleration, which this sect has always exhibited, precludes the hope, that, in a contest between moral light and moral darkness, the cause of benevolence will ever receive from them, either countenance or quarter. They are the men, whose argument consists in the frequent use of hackneyed epithets, and whose tenderest love of truth, finds instinctive gratification in reiterating with imperturbable assurance, tales which in their own consciences they know to be utterly false. This order of philanthropists is more numerous, than would at first view be supposed, and is vociferous or covert, as a judicious estimate of their own interest shall direct.

We might mention many more of the obstacles of this sort, with which the benevolent spirit of the age has to combat, but we have extended this part of the article, perhaps, too far already. We pass on to observe, that whether wise or unwise, right or wrong, the cause is evidently and rapidly on the advance. The precept, *thou shalt love thy neighbour as thyself*, has not only awakened anew the energies of Christendom, but has directed them to objects heretofore forgotten. It has enkindled a general sympathy for the suffering slave. It has established Sabbath schools, in almost every hamlet throughout Christendom, and is annually rescuing millions from ignorance and vice. It is enlisting the noblest minds of Great Britain in an effort to pour the light of science on the poorest classes of society, and promises in the result, to make every mechanic of every degree a well educated man. It has sent even the softer sex, into

the cells of Newgate, and has there witnessed a triumph of religion over vice, than which the present age hath seen nothing more illustrious. It is this same Spirit, which has united every sect, in an effort to send the Bible, without note or comment, to every individual upon earth, and which is also sending men, to explain and enforce its precepts to every nation under heaven.

And not only are these objects of benevolence thus multiplied ; every returning year finds them more vigorously supported. At first, only a few of the most zealous of each sect were enlisted. Now, the greater part are favourable. A short time since, and only one or two classes of society were interested, now every thinking religious man, is willing to examine the subject, and not a few, of every class, are pledged to its success. Before this, the expenses of the undertaking were borne principally by the middling classes, and the poor. Of late, the scene has been changed, and rich men begin to give, in proportion to their ability. In a word, at every step of the undertaking, its supporters have become more and more convinced of its importance. With every increasing effort, they have tasted more richly the pleasures of benevolence. A number, by no means inconsiderable, is to be found in almost every part of Christendom, who have in sober truth pledged themselves to its accomplishment, and have consecrated their wealth and their talents to the service of mankind. This number is rapidly increasing. The rising generation will offer a mighty accession to their ranks.

We cannot, for ourselves, we confess, perceive what injury can possibly result, from such a state of things as we anticipate. We do not think the world will be less happy, for the multiplication of such men as the Marquis de Rentes, or Pascal, or Howard, or Clarkson ; nor such women as Hannah More or Elizabeth Fry. We should be very willing that there should be many such merchants as Reynolds of Bristol, or Anthony Benezet of Philadelphia ; or such judges as the "ever to be remembered Sir Matthew Hale." Nor can we think that the pulpit would suffer, were it universally filled with such preachers as Fenelon and Massillon ; Whitefield and Wesley ; Edwards and Baxter. Nor indeed, as merchants, do we see any reason for apprehension, if the six hundred millions of heathen now on earth, should be taught the wants of civilization, and become, by industry, rich enough to make for them a valuable return. Nor, as republicans, should we complain if the mighty hosts of uncivilized nations should be converted into governments of choice, a result to which the high moral sentiment of the New Testament would inevitably lead them. And, as philanthropists, we surely should not grieve, if, in addition to all this, they were, by being virtuous and happy here, preparing for virtue and happiness hereafter.

To trace out all the branches of the opposition to which we have

adverted, would require more leisure than we can devote to it ; and it is, besides, a task from which we are very willing to be excused. We can only glance at some points, illustrative of the subject, in the history of the mission, the title of one of whose journals is at the head of this article. In doing this, we shall endeavour to look at the subject merely as observers bound to report the facts as they are. We do not belong to the particular religious denomination by which this mission is supported ; we have never contributed any thing towards its funds ; our charities have been called for in other directions ; yet we have received with gratitude whatever of information it has sent us, respecting a newly discovered and interesting portion of the human race, and we have conceived that the respect which is due to what is so evidently a self denying labour, entitles its agents to as fair and candid a hearing as any other class of our fellow-citizens.

The group, now known by the name of the Sandwich Islands, was discovered, as is well known, by the celebrated Captain Cook, in the year 1778, or fifty years ago. They are situated between $18^{\circ} 50'$ and $22^{\circ} 20'$ north latitude, and $154^{\circ} 53'$ and $160^{\circ} 15'$ west longitude from Greenwich. They are about equidistant from the coast of Mexico on the east, and the Society Islands on the south, and are about five thousand miles from the coast of China on the west. They are ten in number, and stretch in a flattened curve E. S. E., and W. N. W. in the following order, beginning from the south east: Ha-wai-i, Mau-i, Moro-kini, Tahu-rawe, Ra-nai, Moro-kai, O-a-hu, Tau-ai, Ni-hau, and Tau-ra. The four principal islands were at the time of their discovery governed by separate and independent kings. Shortly afterwards, Tameha-meha, whose name must be familiar to most of our readers, obtained the supreme power over them all, and retained it until his death in the year 1819, or 1820. He was succeeded by his son, Riho-Riho or Tameha-meha, II., who died in London a few years since. The present heir apparent, is his brother, a promising youth, of about fifteen years of age. The islands are now under the government of a regency.

Their origin is evidently volcanic. In the largest of them, Ha-wai-i, a crater now exists, to which all the other craters that have yet been discovered, are tame and insignificant. A graphic description of this most terrific of natural curiosities will be found at pp. 372—385 of Mr. Stewart's Journal.

The productions of the Sandwich Islands, are very similar to those of the other parts of Polynesia. Their quadrupeds are hogs and dogs. Birds are found in considerable variety. Their most common vegetables are taro, yams, potatoes, though most of the fruits and herbs of the middle and southern sections of our own country, may be cultivated with success. Melons, grapes,

oranges, and pine apples, have been introduced, and thrive perfectly well.

When Captain Cook visited the islands, he found them unusually productive. Every description of food which they yielded was brought to the ships, by order of the chiefs, with a profusion which excited his continued surprise. During a period of three months, the crews of both ships ate and wasted as much food as they wished, they salted great quantities for their subsequent voyage, and it was not all consumed when they arrived in Europe.

The whole group seemed also exceedingly well peopled. Tauai, that which was first discovered, is only thirty-three miles long, and twenty-eight broad, containing about five hundred and twenty square miles, and yet he computes its inhabitants at thirty thousand. From the data which he assumed, this would not seem to have been above the truth.

The dispositions of the natives towards the strangers, were in general peaceful and inoffensive. The affray in which Captain Cook was killed, deserves scarcely to be mentioned as an exception to this remark. It was the result of a momentary excitement, under very considerable provocations, and might have happened in any harbour of Christendom.

With regard to their moral character, not so much can be said. Infanticide was not considered as a crime. Whenever a mother became tired of the care of her child, and especially if it became sickly, she dug a hole in the ground, which formed the floor of her cabin, buried it alive, and trod the earth smooth with her own feet. Human sacrifices were very common. Before the commencement of a war, at the sickness or death of a chief, and we know not on how many other occasions, from one to ten victims were sacrificed. "Every appearance induced the Commodore to believe that this inhuman practice was very general here."*

In all that respects the domestic relations, their moral character was as deplorable as can well be imagined. The connubial tie was dissolved at pleasure, if indeed any thing deserving of that name existed. Marriages between persons of the nearest blood relation are still common.

Taumu-arii or king Tamoru, as he is commonly called, and his son, were both, and at the same time, husbands to one of the widows of Tameha-meha. Captain Cook remarks of the females, that "they could scarcely be prevented from coming on board, and they were less reserved than any women we had ever seen."

Such was the moral condition of these savages, when they were first visited by about one hundred and eighty individuals, of a

* Cook's Voyages, 8 vo. vol. 2d, p. 142.

Christian nation. It surely is not impertinent or unreasonable to inquire what was the result of this visit, and what benefits were conferred upon these unenlightened but hospitable heathen, by the representatives of the most intelligent and virtuous people in Christendom. What efforts were made to do away the horrid rites of human sacrifices? What was done to check the licentiousness which every where prevailed? What was said to teach them that their religious notions were absurd and abominable? In what arts of civilization were they instructed? In a word, in what single respect were they made wiser, or happier, or better, by the residence, during three or four months, of so many men, so much, at least in intellectual cultivation, their acknowledged superiors?

The present age will not wonder, but we hope that an age is coming which will not only wonder, but weep to hear, that to all these questions the answer is nothing, absolutely nothing. So far from attempting to do away human sacrifices, captain Cook himself was present, once at least, during this ceremony, quietly looking on. Instead of teaching them a better religion, he suffered them to offer him solemn, and as far as they knew, divine homage, thus giving his highest sanction to their abominable rites. In the place of inculcating purity, there is no reason to doubt, that the whole crews were surrendered up to a license as debasing and as shameless as that of the savages themselves. In fine, we look in vain throughout the whole of captain Cook's narrative, for the remotest indication, that, either by officer or by crew, a single mechanical art was taught to the healthy, or a single medicine exhibited to the sick. Nay, not only was this not done; we have no manner of evidence that it was ever thought of. All that these Christians did, was to go and look on.

We have seen what the first Europeans *did not* do for the Sandwich Islands. If it be asked, what they actually did for them, truth compels us to answer, that, setting aside the efforts which missionaries have made for their benefit, it has rarely, in the history of our species, occurred, that one man has been the means of entailing upon a numerous and unoffending people, so grievous and aggravated a curse, as was entailed by captain Cook, upon these very Islanders. A part of this mischief was the direct consequence of his visit; the rest, the indirect result of his discovery.

We have mentioned the universal licentiousness of the crews of the discovery ships. The consequence of this licentiousness, was the introduction of a disease among the natives, the peculiar shame of civilization, which, with its train of horrid concomitants, has ever since been sending them by hundreds to the grave, and with which thousands are at this moment languishing in almost every island in the group.

This was the effect of a single visit. But captain Cook pointed out their location to the world, and they soon became to ships traversing the North Pacific, a place of general resort for undergoing repair, for obtaining water and other refreshments. As many as one hundred vessels, in a single year, have entered the harbour of Honoruru. The effects of this intercourse we will now briefly consider.

To go into particulars, will not however be necessary. We have already alluded to the licentious manners of the natives. We have only to consider that these islands are separated by a voyage of twelve thousand and eighty miles from the civilized world; that there the restraints of society had not the shadow of existence; that every one who went there was bound by a sort of professional obligation to keep the secrets of his associates; and also let us remember what are the habits of our seamen in our own ports, under all the restraints of society, and every one may form for himself a tolerably accurate estimate of what was, for many years, the standard of their morality. They were a public brothel for every vessel that floated on the bosom of the Pacific. They were the resort of men, whose vice was too flagrant to be endured by respectable connexions in a civilized land. They had become a nuisance to the world. Virtue, which had successfully resisted the allurements of vice in Great Britain and America, here generally yielded to the torrent of overwhelming debauchery.

And here we cannot but pause to remark the fact, of which, however, the history of our species gives us many other instances, that men pass very readily from the usages of civilized, to those of savage life. Such was the case in the Sandwich Islands. The residents, in very many instances, instead of civilizing the savages, were uncivilized by them. We have been informed by an eye witness, not a missionary, nor a friend of missionaries, that young men, once accustomed to good society in some of our most polished seaports, might be seen in Honoruru, eating raw fish and drinking *poe*, with as much *gout* as the naked Hawaiian who was squatting beside him.

The taste for ardent spirits was early introduced, and both sedulously and successfully cherished. The chiefs became universally intemperate, and when intoxicated, were in the habit of giving way to the most shocking excesses. The reason of this was twofold. In the first place, when once a love for intoxicating liquor has been created, it may be sold for almost any price; and secondly, it has been found by the experience of many an Indian treaty, that when savages engage in traffic with civilized men, alcohol is an all-prevalent promoter of those bargains, in which the "reciprocity is all on one side." But the Islanders were not left to the uncertainty of supply from abroad. A few of

the patriots from Botany Bay, having learnt that there was one country on the face of the earth where law need not be dreaded, found the means of escaping thither, and taught these savages the art of distillation.

The commerce of the Islands has become, it is true, very considerable. Besides fresh provisions, with which the vessels are supplied, large quantities of sandal wood are exported, and some salt is annually sold. But, strange as it may seem, even this tended very greatly to increase the wretchedness of the people. The government is absolute in the king, and, under him, in the chiefs. The whole class of the aristocracy exercise the most uncontrollable authority over the persons, the labour, and the property of their subjects. The plebeian has no right to the tree which he has planted, the pig which he has raised, nay, which he has killed and cooked, nor yet to the petty gratuity which he may have received for labour from a foreigner. Now, under such a government as this, nothing could have been more unfortunate than a foreign trade. Before the productions of the Islands could be exported, the demands of the chiefs upon the people were limited to the supply of their own personal wants, and these could not have been exorbitant. But, so soon as the productions of the Islands and the property of their subjects could be made to minister to their vices or their vanity, there was no end to their rapacity. Every thing that could be sold was seized upon by the chiefs. The people were drained to the very dregs. Their live stock and vegetables were sold, and they themselves were sent in hundreds to the mountains for sandal wood. While the chiefs were building houses to vie with the accommodations of Europe, their subjects were herding in hovels, from which a brute would gladly have escaped. While the people were seen with scarcely a rag of native cloth to cover their nakedness, the rulers were clothed in the richest stuffs of London or Canton, and consuming *poe* from splendid sofas, while their beauties were reflected from the most costly mirrors which an European metropolis could furnish.

The effects of all this may be very easily conceived. Poverty and infanticide, and incurable and infectious disease, made fearful havoc among the people. The Island of Tau-ai was computed by captain Cook to contain thirty thousand inhabitants; now it does not number more than ten thousand. It is probable that a diminution in something like the same proportion, has taken place in the other Islands. Kaahumanu, the present regent, declared it as her opinion, that the population of the Islands had diminished three fourths since captain Cook's visit. The people were affirmed by captain Cook to be neat and cleanly in their habitations; now they are, by the acknowledgment of all, most deplorably filthy. When first visited, their food of every kind

was in amazing abundance ; now, articles of provision are sold at a price so high as to be a cause of general complaint ; so high, indeed, that the missionaries themselves, have frequently been obliged to subsist for a considerable time together, on salt beef and pork, brought from America, and sea biscuit two or three years old, because they did not feel themselves at liberty to purchase fresh provisions and vegetables at the price demanded by the chiefs. And yet, it has been boldly asserted, that this scarcity of provisions, was in consequence of the residence of missionaries !

Such was the state of these Islands, and such the blessings they had received at the hands of Christendom. The American Board of Missions cannot, therefore, be accused of any ill-judged precipitancy, when, as late as the year 1819, they resolved on sending seven married men, with their wives, to instruct these savages in the arts of civilization and the precepts of religion. These arrived in 1820, and found, to their infinite joy, that the whole system of idolatry had been abolished, a new King, Riho-Riho, had ascended the throne, and the way was now opened, without opposition from any existing system, to declare the truths of the Christian religion. In the autumn of 1822, a reinforcement of about the same number of persons was sent out. The last missionary family embarked from Boston, in the autumn of 1827, and are now on their way to the Islands. These have been distributed in the different villages, and, at the date of Mr. Stewart's journal, occupied six separate stations.

And here, it may not be improper to notice a mistake, which has not unfrequently been made, respecting the character of these persons. It has been very currently reported, and even by many well meaning people believed, that the missionaries are illiterate men, such as could not readily find professional employment in their own country. We deem it justice here to declare, most explicitly, that this assertion is utterly and absolutely gratuitous. Those who left this country as *clergymen*, (for some went out as secular assistants,) we believe, without a single exception, had been graduated with reputation in our most respectable colleges, and had also received the advantages of a thorough theological education. With some of them we have been personally acquainted. And if we may judge of those whom we have not known, by those whom we have known, we are free to declare our opinion that the same number of better educated, more intelligent, or more amiable ministers of the gospel, could not be selected out of any religious denomination in this country. Of the character of Mr. Stewart, this journal furnishes sufficient evidence. It clearly shows him to be a gentleman of cultivated mind, classical taste, great familiarity with both standard and modern

literature, and a discriminating love for the beautiful, in nature and in morals.

The first labour of the missionaries, was to reduce the dialect of the islands to the form of a written language. This, after considerable pains, they accomplished with great success. They then proceeded to instruct the chiefs in writing and reading, and, as soon as they were able to make themselves understood, commenced the preaching of the Gospel. The principal chiefs embraced with alacrity the opportunities of instruction, and so rapid was their progress, that, at the time of Mr. Stewart's arrival, April 1823, the king was able to write a letter to their captain, informing him that he had done well in bringing new teachers, and that the usual harbour fees would be remitted. On his first interview with the chiefs, Mr. S. found them dressed in "European costume, and that each had his spelling book and slate on his mat before him. They wrote their names on the slates, for us to read and secure the right pronunciation, and requested us to leave ours for the same purpose."

At first, the chiefs did not desire any but themselves to be instructed, assigning as a reason, that, if the *palapala*, or education, was not good, they did not want their subjects instructed, but if it was good, they desired first to have the advantage of it themselves. Of its excellence they were soon convinced, and were, as we have seen, within two years after the arrival of the missionaries, able to read and write, and in the frequent habit of corresponding with each other from the different Islands.

About the beginning of the year 1824, however, a more liberal spirit began to manifest itself, and they declared their intention to have all their subjects enlightened by the *palapala*, and applied for books to distribute amongst them. Schools were accordingly opened, with the most promising success. The first room for this purpose, was prepared by the young prince, now the heir apparent; and he presided himself, at the head of the school, under the superintendence of the missionaries. From this period, the progress of instruction has been more rapid, than in any other nation with which we have ever been acquainted. In July 1827, it was computed that in O-a-hu, one of the most important of the islands, as many as one third of the inhabitants gave their attention to instruction in some form or other. In a late exploring tour around Tau-ai, it was found, that, with only two exceptions, every village that was visited, was supplied with a school, and some were furnished with two or three. The number of pupils was estimated at six hundred. This was in May 1826. In March 1827, the number of schools was fifty, and of scholars one thousand six hundred, most of whom could read and write. We only have time to mention this, as a specimen of the rapidi-

ty of improvement. The footing of the account is something like the following. "In every district of the Islands, schools have been established, and so rapidly had they increased, that an exact register of them all could not be kept. In the instruction of these schools, not less than four hundred native teachers have been employed, who, being able to read and write, and apparently well disposed, are in no small degree useful to those under their charge." The number of the learners in the several schools, in the beginning of 1827, exceeded twenty-five thousand; and it is estimated that by the close of 1828, twenty thousand inhabitants of the island of Ha-wai-i alone will be able to read the Gospel. It is proper also, in this place, to add, that, besides these labours, there had been one million five hundred thousand pages of tracts printed and distributed among the people, previous to October 1826.

But the attention of the chiefs and the people was not confined exclusively to the acquisition of reading and writing. They began to obey the precepts of Christianity in which they were instructed. Many of them were reformed from drunkenness. Gambling began to be discontinued. Several individuals, of the highest rank, professed themselves disciples of the religion of Christ, and, it must be acknowledged, have adorned their profession by a corresponding conduct. They themselves became the instructors of their people. A very general interest in this subject, was speedily disseminated, and it is now rapidly extending. Chapels have been erected by the chiefs, at their own expense, at all the missionary stations. Of the unusual disposition of the people to hear the gospel, we may form some conception from the facts, that at Honoruru the congregation has sometimes amounted to four thousand people. At Kaisua, the house of worship is one hundred and eighty feet long, and seventy-eight broad, and the usual congregation is three thousand. So great a change in the manners of a people has rarely been witnessed since the days of the apostles. Christian marriage has been introduced among the chiefs, and is making as rapid progress as could be expected. As early as 1824, four years after the establishment of the missions, so correct were their notions of the precepts of the Gospel—that one of them asked, with great simplicity, "*from what part of America sailors came, whether they did not worship idols, and had never heard of God?*" So far were some of them already in advance of many who had been born under all the advantages of a Christian education.

But as the chiefs are the lawgivers of the people, they, as might be expected from conscientious men, began to oppose their authority to the universal immorality which had overspread the nation. The first code of laws, proclaimed at the Sandwich Islands, was at Mau-i, by order of the present regent, in 1824. It

was in these words. 1. There shall be no murder, (relating to the crime of infanticide.) 2. There shall be no drunkenness, no boxing, no fighting. 3. There shall be no theft. 4. All the people must regard the Sabbath. 5. When schools are established, all the people must learn. As might be expected, they also very naturally thought of adopting the ten commandments, as the basis of a code for all their subjects. In many of their ports, females were prohibited from visiting the ships for the purpose of prostitution. And thus, attempts were made in various directions, to render the pagans enlightened and virtuous Christians. The effort on the part of the rulers, must surely be considered as worthy of every commendation, and there is reason to believe, that it has been, to a very considerable degree, successful. Not only have laws been enacted, but a constitution has also been adopted. When Lord Byron visited the islands in H. B. M. ship *Blonde*, he found the people and chiefs sufficiently civilized to be benefited by a constitution, and sufficiently liberal to wish for one. At their suggestion, if we mistake not, he prepared a simple system, somewhat after the model of that of his native country, for their consideration, which was, we believe, adopted.

Such have been the results of these efforts for the benefit of these nations. But this has not been all. The missionaries are men of education, as well as religionists. Their journals present the most interesting accounts that have yet appeared of the state of society and manners, the modes of government and productions of the country. They have explored the various Islands, presented a great variety of facts concerning their geological history, and have made us better acquainted with this lately unheard of group than we are with almost any portion of the uncivilized world. The missionaries were the first men who visited the terrific crater of Mouna-Roa, and though other and educated men have visited it since, the missionaries' description of it yet remains without a parallel. And, in fact, while the newspaper writers were decrying the ignorance and uselessness of these devoted men, there were not wanting others, at least as able, to form a correct estimate of their services, who had adopted a very different opinion on the subject. We have before us the copy of a letter from the Geographical Society of Paris to the Missionary Board, in which, after speaking of the imperfection of all previous accounts respecting this part of the world, and the persevering nature of the missionaries' investigations, they proceed, "The minute account which the missionaries have published respecting this grand phenomenon, (the crater,) the streams of lava, and the changes which have taken place, and also respecting the customs and traditions of the people, are equally new and interesting, and demand the acknowledgment of all who desire the advancement of geographical science."

Now we must acknowledge that all this looks like very praiseworthy effort, and the men who have originated and sustained it seem richly to deserve the respect of the lovers of philanthropy and science. Alfred is immortalized for introducing civilization and literature among his people. The ancient Romans conferred the highest honours on him who had saved the life of a citizen. George III. has endeared himself to every man of feeling, by his benevolent wish that every one of his subjects might have learning enough to read the Bible. And the fame of Brougham, if it descends to succeeding ages, will rest, not so much upon his parliamentary or forensic eloquence, as upon his strenuous efforts to carry that monarch's wish into effect. It may be obtuseness in us, but we must confess ourselves unable to discover why it is not as laudable to accomplish all these designs as to accomplish one of them, nor why he does not as much deserve well of good men, who accomplishes it amid obloquy and contempt, enduring all the self denials of a residence at the Sandwich Islands, as he who wishes it on a throne, or he who achieves it amid the applause and the approbation of the metropolis of Europe. If one half the benefits which the missionaries have conferred upon these savages, had been the result of a desperate warfare, the whole world would ere now have resounded with the praises of the conqueror. But we must confess that we have never been able to discover that indissoluble link which is believed to connect true glory with the burning of gunpowder and the shedding of human blood, nor can we see why it may not be as meritorious, by the inculcation of a peaceful religion, to eradicate malicious passion from the human heart, as to shoot the one half of a people for the sake of restraining the licentiousness of the remainder.

Holding these principles, it may well be supposed that we have been surprised and grieved to learn that this undertaking has been, from the first, uniformly and virulently opposed by the greater part of the civilized residents at the Sandwich Islands, and by a large proportion of the officers and crews of the vessels that have touched at their harbours. We must beg the patience of our readers, while we barely glance at some of the facts, connected with this branch of the subject.

In the first place, the landing of the missionaries was strenuously opposed by every foreigner on the islands, but one. When this was overruled, every means, *fas aut nefas*, was employed, to prejudice the minds of the chiefs against their teachers, and the most unwarrantable falsehoods were sent home, by every returning vessel, to destroy the reputation of the missionaries in their own country. At first, the natives were told the instruction was worthless. The chiefs were soon able to judge of this for themselves. They were then told, that the instruction was good enough, but that the religion was bad. Failing here, they have,

in many cases, as we shall presently see, resorted to physical force. Thus they have fought it out to the last, and if this interesting race of men be saved from utter extirpation, it surely will not be from the lack of effort on the part of the resident foreigners to prevent it. Here, however, we must let Mr. Stewart speak for himself, and we are sure our readers will not ask us to restrain our indignation, at a recital of wickedness, which, in any civilized country, would have consigned the perpetrators to a richly deserved gallows.

"An effort was made by some of the foreigners, on the arrival of the first Missionaries, in the spring of 1820, to have their landing and establishment, at the Islands, forbidden by the government. With this view, their motives were misrepresented, by them, to the king and chiefs. It was asserted, that while the ostensible object of the Mission was good, the secret and ultimate design, was the subjugation of the Islands, and the enslavement of the people: and, by way of corroboration, the treatment of the Mexicans, and Aborigines of South America and the West Indies, by the Spaniards; and the possession of Hindostan, by the British, were gravely related. It was in consequence of this misrepresentation, that a delay of eight days occurred, before the Missionaries could secure permission to disembark.

"In answer to these allegations, the more intelligent of the chiefs remarked—*'The Missionaries speak well—they say they have come from America, only, to do us good: if they intend to seize our Islands, why are they so few in number—where are their guns—and why have they brought their wives?'* To this it was replied—*'It is true, their number is small: a few only have come, now, the more fully to deceive. But soon, many more will arrive, and your Islands will be lost!'* The chiefs again answered—*'They say, that they will do us good—they are few in number—we will try them for one year—and if we find they deceive us, it will, then, be time enough to send them away.'* And permission to land, was, accordingly, granted. Mr. Young, I am told, was the only foreigner who advocated their reception.

"The jealousy of the government was, notwithstanding, greatly awakened; and all the movements of our friends were closely watched: the king was even led to believe that the digging of the cellar, and the laying of the foundation of the Mission House, were the commencement of a fortification, of which the spaces left for windows were the embrasures!

"By the close of the first year, the Missionaries had so far proved to the government, the purity of their motive, and the integrity of their character, that the question of their longer continuance was not agitated. Some of the chiefs had, already, become interested, in the instructions commenced in English, and in the services of Christian worship, regularly observed on the Sabbath, and occasionally, at other times. The partial acquisition of the language of the country—the formation of an alphabet for the native tongue—the elementary lessons in reading and writing which immediately followed—and chiefly, perhaps, the PREACHING OF THE GOSPEL—had, by the end of the second year, confirmed to the Missionaries, the confidence of the rulers, and began to secure to them, decided marks of friendship.

"A first effort, at opposition, having proved thus unsuccessful; another soon made its appearance. The object in this case, was the defeat of the moral influence of Christianity; and the extremity to which some of the foreigners pushed their point, and of the means resorted to, for its accomplishment, you may judge, from the fact, that the pupils of the first female school collected, at this place, by Mrs. Bingham—after being clothed, and brought, with much care and attention, to habits of neatness and propriety in their persons, and made themselves, to be deeply interested in various useful instruction—were borne off, openly and forcibly by them, to become their mistresses, while the instructress herself, could answer the appeals made to her for protection, only, *by her tears!*

"Still the moral influence of Christianity has been felt : and, I am persuaded, its glorious progress cannot, now, be stayed. A chief object, at present, with those opposed to the Mission, is the blasting of its character abroad. A vessel scarcely comes to an anchor, before the ears of those attached to it are filled with slander and falsehood, in reference to the influence exerted by us. Even Captain Clasby had scarce reached the shore, before he heard the lowest abuse heaped on our associates ; and was told by a leading resident, that his passengers *should not be permitted to land* : that the nation was, already, nearly ruined, *by the worthless set of fellows*, we had come to join !

"When a strange ship arrives ; and the officers complain of the extravagance of the harbour fees—this impost is, immediately, declared to be exacted, by the advice of the Missionaries: the high price of articles of refreshment, in the market, is assigned to the same cause : though we, ourselves, are now living almost exclusively, on *sea biscuit, and salt beef and pork*, brought from America,—two or three years old,—and scarcely ever taste a banana or melon, because we do not feel at liberty to purchase fresh provisions and vegetables—much less fruit—at the price demanded by the chiefs. Equally untrue is a whole catalogue of charges, by which we are represented, as the worst enemies of our countrymen and of all foreigners ; and the basest of men, both in principles and morals.

"The minds of many visitors, at the Islands, are by these means, so strongly prejudiced against us, that they do not call at the Mission House ; and, in some instances, after a casual introduction, they have, on meeting us in the street, passed in haughty silence, and even betrayed a sneer of contempt. And, when they take their departure, they bear with them to the coasts of Mexico, and Peru, and Chili, or to Canton, England, and America, the most erroneous impressions of our influence here, and, not unfrequently, the lowest slanders of our character.

"When I speak thus, of the opposition with which we are obliged to contend, you are not to understand that all foreigners—residents or visitors—are of the character represented. Some of every class are warmly and decidedly our friends, and have our high respect for the rectitude of their character, and our sincere gratitude for many favours : and, inconsistent as it may appear, even those most embittered in their feelings against our object, treat us personally with respect ; and often with great kindness. Scarce a week passes, in which, donations of a liberal and important character are not conferred on one or another of the family : and we are, often, made to feel the obligation of civilities, which we have not the means of returning."

To the reasons of this opposition, at the commencement, we have already alluded. The perpetrators of villany, which would have cast them out of the pale of reputable society at home, did not wish any resident among them, who was not bound, in self-defence, to maintain a very cautious silence respecting the state of morals at the Sandwich Islands. Combined with this, there was, doubtless, the conviction that a higher degree of intelligence among the natives, would render the adoption of different rules of barter a matter of necessity.

The missionaries endeavoured, as might be expected, to arrest the prevalence of drunkenness. Here also, they were met, on the part of the foreign residents, with a most active resistance. The efforts of these men, were, in this case, with sagacity and too fatal success, directed to the person of Riho-Riho ; the lately deceased monarch. Here we will introduce two extracts from the Journal. We greatly mistake, if any parent will read them without emotion. We beg leave only to remind our readers that Keopulani was, a few months before, a benighted heathen.

"*Evening.* A sail was descried this afternoon, in the channel between Ranai and Morokai : soon afterwards, five guns, fired in rapid succession—the private signal of Riho-Riho—announced the approach of his majesty. The brig came to an anchor just as we had finished evening worship with Keopuolani : and Mr. Richards and myself, accompanied Kekauonohi and Nahienaena to the beach—already thronged by common people—to receive him. He landed in a small boat, with a single chief, and saluted us in a polite and friendly manner. After embracing his queen and the princess, he took one under each arm, and hastened up the beach. The parting of the mother and son, when we left Honoruru, had interested us so much, that we felt desirous of witnessing their first interview, after a month's separation. The chiefs had assembled, and were formally seated on their mats, in a large circle, before the tent of Keopuolani, waiting the approach of their monarch. He entered the circle opposite to his mother, and where Wahine-pio, the sister of Karaimoku, and mother of his youngest queen, was seated. Dropping on one knee, he saluted her : on which, she burst into tears—and springing from her mat, led him to that of his mother. He knelt before her—gazed silently in her face for a moment—then pressed her to his bosom, and placing a hand on each cheek, kissed her twice in the most tender manner. The whole scene was quite affecting : I scarce ever witnessed an exhibition of natural affection, where the feelings were apparently more lively and sincere. The king is a fine looking man, and graceful in his manners ; and, while gazing on him, the queen's heart seemed to float in her eyes, and every feature *'told a mother's joy.'*

"*Tuesday, 24.* On going to the beach, as usual, this morning, at sunrise, we found every indication of a scene of revelry just ended. Riho-Riho had taken possession of his mother's establishment ; and, instead of the orderly and pleasant group which had uniformly before been waiting our arrival, we saw the ground every where strewn with the bodies of men and women, who, evidently, had sunk unconsciously to sleep, amid the vapours of the bottle. Several empty liquor cases—of brandy, gin, and rum—stood on a large mat, in front of the tent in which the king was sleeping ; and bottles, drained of their contents, were dispersed widely around.

"None of our former party, chiefs or people, were to be found. At eleven o'clock, we repeated our visit :—but all was riot and debauchery, and, not meeting with any of our pupils, we quickly turned from so melancholy a scene of licentiousness and intoxication.

"At sunset, we again went to the beach. The wild and heathenish sounds, of the song and the dance, were distinctly to be heard, long before we reached the place of our customary worship : and the tent of the king was still the centre of revelry.

"On arriving near the crowd, Taua, the private chaplain of the queen, quickly approached us, saying, he had been sent to await our arrival, and to inform us, that Keopuolani would attend prayers at the residence of her daughter, to which she had removed. This was a pleasing message to us ; and our satisfaction was greatly increased, on entering the ranai of the princess, to find the whole of our pupils assembled—even Kekauonohi, the young queen.

"Never can we forget the appearance of Keopuolani. The countenance and manner of no *pious Christian mother* could have manifested more real anguish of spirit, in witnessing the dissipation of a beloved son. As we approached, her eyes filled with tears, and, with a voice almost inarticulate from emotions ready to overpower her, she lifted her hand, and pointing to the scene of intemperance and debauchery, exclaimed, '*pupuka ! pupuka !*'—'*Shameful ! oh shameful !*'—and throwing herself backward with a convulsive sob, hid her face and her tears in a package of tapa, against which she was reclining.

"Our hearts were deeply touched : and our spirits at once assumed an elasticity, that caused them to rise to a height proportionable to the depression under which they had laboured. With an excitement of hope never known before, we commenced the evening sacrifice. Taua seemed to partake deeply in our feelings, and exercised a spirit of prayer, that would have elevated hearts far more insensible than ours were at the time. While he affectionately presented the queen

herself before the throne of God, and fervently besought the outpourings of the Holy Spirit upon her, we could scarce resist the belief, that the strong principles of moral rectitude, which she had uniformly manifested—and which were then so strikingly displayed—were but the dawns of that light, which would securely guide her immortal spirit to the realms of everlasting day : and touched with sympathy—as for a fellow-child of God—we were constrained to mingle our tears with those of the parent, while he proceeded most humbly and importunately to supplicate the forgiveness—reformation—and eternal redemption of her son. Before bidding her good night, she earnestly begged us to pray for the king ; and on our replying that she must also pray for him, she said, she constantly did, but that they both needed our prayers.”

A short time after this affecting incident, his mother died. Riho-Riho was present, and behaved with great propriety. After the notice of this event, the Journal proceeds.

“ Scarce ever were my feelings more deeply wounded, than they have been this evening. During the fortnight of Keopuolani’s illness, the king was perfectly sober. His heart seemed touched by the exhortations of his mother, and open to the persuasions of the Missionaries, to forsake every evil habit, and seek the favour of God. His sensibilities were greatly excited by her baptism, death, and burial : and he resolved to abandon the habit of intemperate drinking. Apprized of this, some of the foreigners here at present, determined to achieve a triumph over the Mission, as they consider it, by the defeat of an object so desirable and so important.

“ With this view, two or three successive dinner parties were made by them—one on the Sabbath—which Riho-Riho was importunately urged to attend : but anticipating the design, he perseveringly declined. Other attempts were made to draw him into their company, but all proved unsuccessful till this morning, when he was induced to visit one of the ships, under the pretence, on the part of his seducers, as we are informed, of showing some remarkably beautiful specimens of goods. After being some time on board, refreshments of various kinds, and liquors, were served ; but of the last the king refused to partake. A bottle of choice cherry brandy was then produced—as a liqueur incapable of intoxicating—and which, having never seen before, he was led to taste—and to taste again, till he requested a bottle of it to take on shore : a favour quickly granted. The result has been, that, as Mr. Ellis and myself went down the beach at sunset, we saw the king seated in front of his tent, under the full excitement of liquor—Pauahi, in a disgusting state of drunkenness, by his side—a woman in a similar condition, and almost naked, dancing and singing before them—and twenty or thirty others, of both sexes, with cases of gin and rum at hand, beginning a dreadful revel.

“ As we approached the circle, Riho-Riho immediately said to us, in a kind, but self-condemning tone ‘ *Why do you come here ?* ’—to which Mr. Ellis replied—‘ we have come to express our sorrow for the sad condition you are in, and to reprove these, your guilty people, for encouraging you to destroy yourself, both body and soul’—upon which, he dismissed us with the answer—‘ You are good men—you are my friends—but *eia no ke wahi o Debelo !*—this is the place of the devil !—and it is well for you not to stay here !’ The individual, who has been thus successful in his end, has since boasted, not only that he has made the king drunk, but that he *will keep him so*, if he is obliged to send a vessel to Oahu expressly for more cherry brandy for the purpose !

“ But the sorrow of the evening did not rest here. At the request of the chiefs, we have attended prayers with them, at the establishment of Kaahumanu, every evening about eight o’clock. On going down, for this purpose, to night, we saw a considerable collection of persons gathered round Governor Adams, as he was seated in the open air, surrounded by servants with torches. The bright glare of these presented the party in strong light to us, while we, ourselves, were shrouded by it, in double darkness. In front of the governor was one foreigner upon his knees, making a *mimic prayer*, in imitation of a Missionary : while another was writing, in large letters on a slate, and presenting to him for perusal,

some of the basest words of our language ! As may be supposed, the recognition of our presence threw the company into some confusion ; and one person hastily brushed his hand over the slate, but not till the indignant eye of Mr. Ellis fully told a knowledge of its disgusting contents !”

Thus far, however, the persons of the missionaries had been sacred. This was not, however, the case, when the progress of religious knowledge had elevated the chiefs to a higher degree of morality. The true reason of the hostility to the missionaries, was at once revealed, when the chiefs prohibited females from going on board the ships in the harbour, for the purpose of prostitution. The opposition then broke out in acts of personal violence, which, we regret to say, have been several times repeated. To some of the particulars of the first of these outrages, Mr. Stewart was himself an eye-witness. His account is in these words.

“The Mission House had been removed from the place of its original location ; but familiarity with every spot, enabled me easily to grope my way through the luxuriant plantations by which it is now surrounded. But how great was my astonishment, at the peculiar circumstances in which I found our inestimable friends, Mr. and Mrs. Richards. Instead of being permitted, unobserved, to break their slumbers by the salutations of friendship and affection, how was I surprised to meet, at my first approach to the house, the presented bayonet, and to hear the stern challenge of the watchful sentry—‘*Who goes there ?*’—and when assured that it was a friend—how inexplicable to my mind the fact of receiving the cordial embraces of my brother—not in the peaceful cottage of the Missionary—but in the midst of a *garrison*, apparently in momentary expectation of the attack of a foe ; and to find the very couch, on which was reclining one, who to us has been most emphatically a *sister*, surrounded by the muskets and the spears of those, known to the world only by the name of savages !

“My first thoughts were, that a revolt of the island, against the general government, had taken place, in which our friends had been seized, and were guarded as captives—or that some formidable party of unfriendly natives had risen with the determination of destroying them, and from whom they were protected by the higher chiefs—but, as soon as an explanation could be given, I learned that their *peril* was not from the heathen, but from the degenerate sons of a civilized and Christian country ! The seamen of a large British ship, at anchor at Lahaina—exasperated at the restraints laid on their licentiousness, through the influence of the Mission—had carried their menaces and open acts of violence, against Mr. and Mrs. Richards, to such an extent as to cause the chiefs to arm a body of men, and defend them at the hazard of life : and at that very hour, three armed boats’ crews—amounting to near forty men—were on shore, with the sworn purpose of firing their houses, and taking their lives, before morning !

“Only two days before, after a succession of fearful threats and gross insults, the same party—countenanced and upheld by their captain and officers, and armed with knives and pistols—had landed under the black flag of death, and surrounded the Missionary enclosure—then unprotected—offered life to our friends, only on condition of their retracting their instructions to the people, founded on the Seventh Commandment. The firmness, with which they were met by Mr. Richards, only made them doubly infuriate ; and, as they seemed ready to fall upon him, to execute their horrid threats, Mrs. Richards, with the spirit of a martyr, rushed between them and her husband, exclaiming, ‘My only protection is in my husband and my God—I had hoped, that the helplessness of a female, surrounded only by heathen, would have touched the compassion of men from a Christian land—but, if such cannot be the case, know that I stand prepared to share the fate of my husband ! When I left my country, I took my life in my hand, not knowing when I might be called to lay it down—if this is the time,

know, that I am prepared—sooner than disgrace the character I sustain, or dishonour the religion of my Master, by countenancing in the people we have come to enlighten, a course of conduct at variance with the word of God—to bid you strike the bosom, bared to the blow !” For a moment, the heroism of a refined and lovely woman appeared to shake the firmness of their purpose, and they retired from the ground : but it was only to return, with a more relentless determination—and the interference of the natives took place in time, barely to rescue the lives of their teachers, at the hazard of their own. So resolute were they, however, in the defence, when once commenced, that three thousand men were armed, and in readiness to seize the ship, and to make prisoners of her crew, should another outrage of the kind be attempted.”

This was in the autumn of 1825. In the autumn of the succeeding year, a similar transaction took place. The crews of some English and American whale ships, on this occasion, landed at Lahaina, threatening to kill Mr. Richards, because through his influence a stop had been put to prostitution. As he was absent, they went in a body to his house to demolish it, and they would have accomplished their purpose, had it not been *guarded by friendly natives*. They however took away his hogs and fowls, as their booty. A Mr. Butler, a resident at Lahaina, performed the honourable office of directing this party, and pointing out the premises and property, to the sailors. *The women all fled to the mountains*. For several days, the sailors prosecuted their search through the village for women, breaking into houses, and taking away the property of the unoffending inhabitants. They bore with fortitude the spoiling of their goods, but they yielded not an inch to the demands of the ships ; and the sailors, at last abandoning their search, sailed for O-a-hu, in hopes of getting women there.

Of Mr. Stewart’s book, we have already expressed the most favourable opinion, in general terms. We can recommend it with confidence, to every man of literary taste and genuine sensibility, and to the lovers of natural science. It is as entertaining as instructive ; being stored with information not less curious than useful, concerning the history, condition, customs, and superstitions of the natives of the Islands. The vein of warm piety which pervades it, is connected with truly refined sentiment and liberal knowledge. Several of the first chapters are occupied with the author’s voyage to the Pacific Ocean, and though descriptions of sea voyages be usually, and might seem inevitably, trite and monotonous, yet the natural and happy manner in which the author’s new impressions and casual emotions are stated, communicates to this, a peculiar fresh attraction and excellence. We shall take two or three passages from the record of the long voyage as specimens.

“ *Evening*. A violent squall has just swept over us ; and, before our sails could be secured, the lee-bulwarks of the ship were nearly under water. Every thing had an aspect more like that of the gale in the gulf stream, than at any time since. The wind rushed so loudly through the rigging, as to require a full exertion of lungs in the captain and mates, to cause their orders to be heard, and the

rain poured in torrents. Both wind and rain continue, in an abated degree, and the ship is still reefed down, so as, in sea-phraseology, to be '*all snug*.'

"There is something in this state of things, that produces a peculiar effect on my mind, and one, which you may be surprised to hear me say, is, that of enjoyment. The low and scudding clouds—the driving rain—the sullen heavings of the ocean, and the roaring of the water at the prow—the rapidity with which we dash from wave to wave, while our lee-gunnels are almost buried in the deep—though they give to all without, the aspect of suffering and of danger, induce a musing mood which I have found delightful. Every thing on deck too, has a like tendency—nothing generally is heard, but the creaking of the masts, and yards, and the rattling of the cordage, while the officers, in their watchcoats, and tarpawling caps, stand at their respective posts, and the sailors shelter themselves, from the worst of the storm, under the lee of the boats or weather-bulwarks of the ship."

"All hands have been actively engaged to-day, in putting the vessel in trim for Cape Horn. The upper yards, masts, and rigging, have been sent down : and the ship drest, in a complete suit of new sails of the stoutest texture. These preparations look formidable ; but seem justified, by the general aspect of the weather. Just before night, there was a very peculiar exhibition, on sea and sky. For half an hour before and after sunset, the whole heavens, except a quarter of a circle in the west, which was perfectly clear, were covered by dense, and unusually lowering clouds. The elevation of the unshaded arch, was not more than five degrees ; and under it, on the farthest horizon, a stretch of vapour extended, so greatly resembling a distant coast, that, had we not known it to be impossible, not all the power of vision, aided by our sea-glasses, could have satisfied us, that it was not the American Continent.

"The rays of the sun, entirely shut out by the heavy canopy above, came to us, only in splendid reflections from this fairy realm ; and presented a succession of mountains, and groves, and spires, and turrets, and towers, and, even *steam-boats* and *light-houses*, all, in the richest colouring, and glittering with silver. For some minutes, the splendour of the sight momentarily increased, drawing from us, enthusiastic admiration : when, the sun, suddenly, burst from behind its dark drapery, and, in an instant, the whole mass of clouds, over and around us, were changed, in all their ponderous forms, from the blackness of night to the brightest crimson ; while the sea, before shrouded as in a funeral pall, gleamed with the mingled reflections of purple and gold. The transition seemed one of enchantment ; but our admiration was not unaccompanied by emotions of awe. The lowness and thickness of the clouds, made the reflections of their colour so strong, that the sun, though perfectly unobscured, glared with a fiery and unnatural light ; which, as it gradually faded into the sickly shades of an eclipse, marked the sails and rigging, and every countenance, with the hue of death. Minds, that soar above the power of superstition, might have felt a momentary uneasiness, at such unusual omens ; and, while sea-birds, which delight only in the drivings of the storm, screamed round our masts above, or silently gazed at us, as they tossed on the waters below ; I could but exclaim—

'Dark gath'ring clouds, involve the threat'ning skies ;—
The sea heaves, conscious of th' impending gloom—
Loud hollow murmurs from the deep arise—
They come—the Spirits of the tempest come !'"

"*Friday, April 25.* The appearance of Hawaii, this morning, was exceedingly beautiful. We were within a few miles of the shore ; and the whole of the eastern and northern parts of the island were distinctly in view, with an atmosphere perfectly clear, and a sky, glowing with the freshness and splendour of sunrise. When I first went on deck, the grey of the morning still lingered on the lowlands, imparting to them a grave and sombre shade ; while the region behind, rising into broader light, presented its precipices and forests in all their boldness and verdure. Over the still loftier heights, one broad mantle of purple was thrown ; above which, the icy cliffs of *MOUNA-KEA*, at an elevation of 17 or 18,000 feet, blazed like fire, from the strong reflection of the sunbeams, striking

them long before they reached us from their watery bed. As the morning advanced, plantations, villages, and scattered huts, were distinctly seen, along the shore; and columns of white smoke began to rise, here and there, from the early fires of the inhabitants.

"At nine o'clock, the breeze being light, a boat was sent off from the Thames for refreshments. Not long afterwards, the deck of our ship echoed, with the cry, '*a canoe!—a canoe!*'—and one of the rude barks of the natives was seen rapidly approaching us. Every eye was, instantly, fixed on it, with intense observation; and I hastened to assist H— from her state-room to the cabin windows, to view the uncultivated beings, with whom we are to spend our lives. A first sight of these wretched creatures was almost overwhelming. Their naked figures and wild expression of countenance—their black hair, streaming in the wind, as they hurried the canoe over the water, with all the eager action and muscular power of savages—their rapid and unintelligible exclamations, and whole exhibition of uncivilized character, gave to them the appearance of being half-man and half-beast, and irresistibly pressed on the thoughts the query—'*Can they be men—can they be women!—do they not form a link in creation, connecting man with the brute?*' This, indeed, seemed to be the general impression; and, the officer heading the boat sent to the shore, on his return, exclaimed as he ascended the ship, '*well, if I never before saw brutes in the shape of men, I have seen them this morning:*' and, addressing himself to some of our company, added, '*you can never live, among such a people as this—we shall be obliged to take you back with us!*'

"Other canoes soon arrived, and many gathered round us, to gratify their curiosity, and dispose of fish, watermelons, bananas, sugar cane, and sweet potatoes. They remained an hour or two, and, notwithstanding our first impressions, greatly commended themselves to us, by their artlessness and simplicity, and an apparent sprightliness, and intelligence of mind. They seemed rejoiced to know, that more Missionaries had arrived, and on hearing it, addressed one another with great animation, exclaiming, '*Mikanere—maitai, maitai—nui, nui maitai.*' '*Missionary—good, good—very, very good.*' They informed us, that the Missionaries at the Islands were all well; and were, with the king and chiefs, at Oahu.

"At twelve o'clock, we entered the channel between Maui and Hawaii, and ran close along the north shore of this last Island. Every thing here, exhibited great poverty. The mountains were covered with clouds, and not a tree or shrub was to be seen. The whole surface of the country, was spread with dark rocks; and the little grass perceptible was scorched and sunburnt. The huts seen scattered along the beach, looked more like the styes and kennels, of pigs and dogs, than the abodes of men: and the whole appeared, something like the Hawaii, I had pictured to my mind's eye, when I first seriously thought of devoting myself to the missionary work in these Islands. Yet, the sight made me almost draw back, from a home so barren, and so miserable.

"In the evening, Hawaii and Mouna-kea again at a distance, afforded another of the sublimest of prospects;—while the setting sun and rising moon combined in producing the finest effects on sea and land. The mountains were once more unclouded, and, with a glass, we could clearly discern immense bodies of ice and snow on their summits."

The following additional excerpts, will serve to illustrate further the character of Mr. Stewart's pages.

"The idolatry of the Sandwich Islanders was of a form peculiar to the Polynesians, called *tabu*, from an appendage to the ordinary worship of images expressed by that term, so singular in its nature as justly to give name to the whole system. The *tabu*, though intimately connected with the services of religion, did not consist of any fixed and unchanging observances—but was uncertain and arbitrary in its requisitions. It was an instrument of power in the possession of the priests and king, which might be made to assume any shape, which interest, passion, or even caprice might dictate, and to extend to all things civil as well as religious. And every breach of *tabu* being punishable

with death—it was an instrument by which the people were governed as with a rod of iron.

“The word, itself, has generally been considered by foreigners as synonymous with the English word *prohibition*. But its literal and peculiar meaning is *consecration*. Thus the priests, the king, the chiefs, who claimed descent from the gods and the temples, were *tabu*. So also an animal or cluster of fruit, or other article, set apart for sacrifice—and a day, week, or month, appropriated to the worship of the gods.

“The *tabus* varied greatly both in extent and duration. Sometimes a single tree, or a single animal only, would be made *tabu*, and at others, a whole grove or herd,—sometimes a single house, or piece of land, or fishing ground, at others a whole district or even island. Sometimes the *tabu* would be limited to a day; at others, would continue for weeks and months. *Tabus* of *time*, varied in the degree of rigour with which they were to be observed; sometimes requiring only a cessation from ordinary work and amusement; at others, an entire seclusion: when, to be seen abroad, was death. Every fire, too, must then be extinguished—every sound, even to the crowing of a cock or barking of a dog, prevented,—and the silence and desolation of death, be made to reign throughout the whole extent of the *tabu*, whether of district or island.

“But though thus various in its features, and changeable in its forms, there were points in the *tabu* which were general and unalterable. One of these was the *tabu* of all the best kinds of food for sacrifice to the gods, and for the use of the men; the women were thus excluded from the use of hogs, fowls, cocoanut, bananas, several kinds of fish, &c. &c. Another, was a *tabu* excluding the females from the houses of the men. A woman was not permitted to enter the habitation, even of her father or husband, nor to eat in company with any man: These were the points, a breach of which, the king determined to make the signal for the abolition of the whole, and for the downfall of idolatry.

“Having secretly consulted the high-priest and principal chiefs upon the subject, and gained their consent and co-operation, he made a great entertainment, in the month of November, 1819, to which all the foreign traders, mercantile agents, and residents, then at the Islands, were invited, together with the whole company of chiefs. Two long tables, one for males and another for females, in conformity to the *tabu*, were spread in an open bower, around which a great concourse of common people assembled. After the food was served up, and all the company had taken their seats, the king, evidently much agitated, arose with a dish of the food denied to females in his hand, and walking first round the table of the men, as if to see that all were properly provided, hastily turned to that of the women, and seating himself between two of his queens, began to eat with them, from the dish he had carried. At this, the whole astonished multitude burst into the exclamation, *ai noa! ai noa!* (*ai* food—*noa* common, or general, in contra-distinction to *ai tabu*—food sacred.) The high-priest himself, rushed to fire an adjoining temple, and messengers were instantly despatched in all directions to perpetrate a similar conflagration. In a very few days, every heathen temple, in the group, was mouldering in ashes, and the idols, which had not shared the same fate, were cast useless on the beach, or reserved merely as objects of curiosity.

“That it was the pleasure of the king, thus to cast off the *tabu*, and to abolish idolatry, seemed sufficient to satisfy the minds of the people. One ambitious young chief of rank, however, attempted, by it, to excite the natives to a rebellion; but in this he was unsuccessful—his party was defeated, and himself and wife slain in battle, in the winter of 1820.”

“At the present time, a favourite sport—*moku-moku*, or boxing, has been revived. It is a national game, regulated by established principles: to secure an adherence to which, managers and umpires are appointed, who preside over it, and determine points of dispute. The champions usually belong to different chiefs, and enter the ring inspired by a *pride of clan-ship*, as well as by the ambition of personal distinction. When one has been prostrated, so as to yield the contest, the victor paces the circle with an air of defiance, challenging any other to a trial of strength and skill: and thus, in the course of half an hour, a dozen

may successively lose an ultimate triumph, by being themselves knocked down by some combatants of greater tact or muscular power, who at last clears the arena.

"A well directed *blood-starting* or *levelling-blow*, is followed by unbounded applause from the surrounding multitude, testified in the most appropriate manner, by *yells* and shouts of barbarity, that make the whole welkin ring, while the tossing of thousands of arms into the air, jumping, dancing, and clapping of hands, prolong the expression of delight.

"These boxing matches, often lead to wagers among the spectators—and not unfrequently end in violence and death. At almost every shout from the ring, the natives of our household exclaim, '*Taha! taha! mamuri make!*'—Ah! ah! by and by murder! and inform us that many are killed in the moku-moku; and that, only a few years ago, forty men were murdered at one time, on the very spot now occupied by the exhibition." * * *

"The common people, not unfrequently, become so much excited at games of the *uru maita* and *pahe*, that the greater number of thousands collected round will be themselves betters on the different parties; though in doing it, hundreds stake the very last article they possess in the world, even to the maro or pau, they are wearing at the time." * * *

"The climate of the Islands is far more cool, than might be supposed, judging from the latitude in which they are situated. This is partly owing to the vast unbroken body of water by which they are surrounded, but principally and more immediately to the prevalence of the north-east trade wind, which, during the larger portion of the year, sweeps over and about them with great velocity, and from the direction in which it comes, and the surface over which it passes, possesses no inconsiderable refrigerative power. In the trade wind, the mercury in Fahrenheit's thermometer—in the shade—seldom rises higher than 80° and 82°, during the summer, and 72° and 74°, during the winter.

"From the very height of the mountains, however, there are places and districts, on the leeward or western sides of some of the islands, which are inaccessible to the regular wind, except when it becomes a gale, breaking over the lower hills, and rushing in strong eddies round the points and promontories, which at ordinary times form a barrier to it. Lahaina is situated on one of these spots, and probably is the hottest district in the group:—the mercury usually rising as high in winter here, as it does in summer where the trades prevail; and in summer frequently to 88° and 89°.

"During the summer months, or from March to October, when the trade wind is most strong and most regular, Lahaina enjoys a pleasant, and often fresh breeze; but even then there is not circulation enough to give it the ventilation received, wherever the former wind reaches. In winter, when the trades are generally light, and often interrupted entirely by calms and south-westerly winds, the sea-breeze also becomes light and variable, and a much greater stagnation of air takes place, rendered doubly impure by exhalations from the taro beds and fish-ponds, with which the settlement is more or less filled. These circumstances cause the climate of Lahaina to be rather unfavourable to health.

"As to *clouds* and *rain*, from March to October the atmosphere throughout all the islands is usually clear and bright, similar to your finest June weather. On the windward, or eastern parts, however, there are almost daily showers, and in the mountains not unfrequently continued rains, from the lodgment of clouds against their tops and sides. In most places on the leeward sides, there are also occasional showers; but at Lahaina scarcely a cloud, except on the mountains, is, during the summer, to be seen, and almost never a drop of rain. From September to April the atmosphere is more or less hazy—obscure and cloudy—with frequent light rains in some places, and in others heavy storms of two or three days continuance. We have had three storms only at Lahaina, since our residence here, and they have been in December, January, and March." * * *

"I have seen a female, of high rank—and monstrously large—going to church in a loose slip of white muslin, with thick woodman's shoes, and no stockings—

a heavy silver-headed cane in her hand, and an immense French *chapeau* on her head!

"On Sunday, too, there is a display of *equipage*, not seen every day. The chapel being near half a mile from the village, some of the *grandees* ride to church:—their carriages, to be sure, belong to '*the birth day of invention*'—especially the *state coach* of the late king, which, I presume, was once a *tinker's wagon*. *Kaahumanu* and *Taumuarii* always come in this; the young queens, usually, in one more modern and airy—of the kind called *Dearborn* in America. These vehicles are always drawn by twelve or fifteen natives; their horses having not yet been broken to the harness.

"Whether the *nobility* here have been told that those, *who wish to be considered most genteel*, in America, do not go to church till after the services have commenced, or whether the newly introduced duties of the *toilette* occasion the delay, I cannot determine; but, the most stately do not generally arrive at the chapel till some time during the first prayer, which, consequently, is disturbed by the rumbling of their *chariot* wheels—the hooting of the rabble that hurry them along the plain—the bustle of alighting, and the parade of entering. You could not avoid smiling, were you to see with what dignity some of these saunter up the aisle. I speak without hyperbole, in saying that one queen dowager takes at least ten minutes to walk from the door to her sofa in front of the pulpit."

"The poverty of many of the people is such, that they seldom secure a taste of animal food, and live, almost exclusively, on taro and salt. A poor man of this description, by some means, obtained possession of a pig, when too small to make a meal for his family. He secreted it, at a distance from his house, and fed it till it had grown to a size sufficient to afford the desired repast. It was then killed, and put into an oven, with the same precaution of secrecy; but, when almost prepared for appetites, whetted, by long anticipation, to an exquisite keenness, a caterer of the royal household, unhappily, came near, and, attracted to the spot, by the savoury fumes of the baking pile, deliberately took a seat till the animal was cooked, and then bore off the promised banquet, without ceremony or apology!"

"The king and highest chiefs have a singular mode of raising money, and one I presume entirely peculiar to themselves. It is by building a fine new house; and, on taking possession of it, to refuse an entrance to any one, without a present in cash proportionate to the rank and property, both of the giver and receiver. The *tabu* on the house of the king, at the time of our arrival, was of this nature. Many of the chiefs presented fifty, sixty, and eighty dollars; merchants, sea-captains, and foreign residents, twenty and thirty; and every servant of the household, even his pipe lighter, at least two dollars. The whole sum thus collected amounted to several thousand dollars. A few months ago the mother queen raised eight hundred dollars in the same manner."

"The nobles of the land are so strongly marked by their external appearance, as at all times, to be easily distinguishable from the common people. They seem, indeed, in size and stature, to be almost a distinct race. They are all large in their frame, and often exceedingly corpulent; while the common people are scarce of the ordinary height of Europeans, and of a thin rather than of a full habit. Keopuolani, the mother of Riho-Riho, and Taumuarii, king of Tauai, are the only chiefs, arrived at years of maturity, I have yet seen, who do not weigh upwards of two hundred pounds. The governess of Tauai, the sister of Taumuarii, is said to weigh near four hundred; Nahamana, one of the queens of Tamehameha, weighs two hundred and ninety—her sisters, Kahumanu and Kalakua, nearly the same; and her brother Kuakini, governor of Hawaii—though little more than twenty-five years old—three hundred and twenty-five pounds. This immense bulk of person is supposed to arise from the care taken of them from their earliest infancy, and from the abundance and nutritious quality of their food, especially that of *poe*—a kind of paste made from the taro, an esculent root—a principal article of diet. They live on the fat of land and sea—and, free from all toil and oppression, their only care is, '*to eat, and to drink, and to be merry.*'"

ART. IV.—BEES.

- 1.—*The Honey-bee ;—its Natural History, Physiology, and Management*, by EDWARD BEVAN, M. D. London: Baldwin, Cradock & Jay, 1827.
- 2.—*The Rural Economist's Assistant in the Management of Bees, principally taken from the German writings of the Rev. J. L. CHRIST, First Minister of Krohnberg, and Member of the Royal Husbandic Society at Zelle: by DAVID SOUDER.* Lancaster, Pennsylvania, 1807.

To the youthful mind, natural history presents a delightful and exhaustless feast. In the history of the horse, the dog, and the cow, we feel a particular interest, created by familiarity and a sense of usefulness. There is something inspiring in the very air and bearings of a gallant steed, which, independently of his services, excite our admiration, and win our affections: but, in the faithfulness, love, and temper of the noble animal, we find increasing inducements to esteem and to cherish him. Every thing relative to him, has thus its sentimental value; and, in his history, we fail not to feel continued and even progressive satisfaction. The savage lords of the forest enchain attention, and rivet curiosity, by other qualities.—It is in the very nature of our race, to be attracted by beauty of form and colouring, to be captivated by graceful movements, and to delight in exhibitions of fleetness and dexterity; but a more intense, though more fearful interest is created by the manifestations of superior strength, courage and ferocity.—Hence, in the presence of the lion, the steed stands unheeded; and when the tiger or hyæna is near, we dwell not on the less exciting qualities of our faithful dog.

As the intellectual faculties unfold themselves, we begin to enjoy the subject of natural history, on a higher ground, with feelings less absorbing, but with relish more continued, and in lessons more instructive. Mind, in insensible gradation, is seen to pervade the whole animal creation, from that glimmering of instinct which is dimly perceived in the polypus and the worm, to that still limited but strong intelligence, which illumines our race, and gives to it the mastery over the rest. The survey of such a series, cannot fail to throw new light on the difficult but important study of moral philosophy; which indeed owes much of its recent progress to the lights of analogy. In the nice adaptation of means to an end, in the care which has been taken to preserve each generation, and to continue the species, and in the numberless proofs of paternal regard for all his creatures, we find ever multiplying proofs of the existence, the wisdom, the power and the benevolence of

the Great Giver of Good. There is, too, in this study, a useful lesson of humility and kindness. He who contemplates the wondrous effects of mere instinct, will scarcely boast of his own intelligence; and he who knows that there is not only understanding, but affection and sentiment, in even the meanest thing that lives, will be less disposed to sport with the feelings, or to wantonly disturb the enjoyments of the animals which have been given to him for his use.

In the curious history of the beaver, we learn the value of the united labour of many individuals, directed to a common end, and experience a particular pleasure in its perusal, because of both the rareness of such associated exertion, and its nearer relation to our own social state. Few general readers, even in well instructed classes of society, are aware, that, among insects, are found many societies approaching to a much closer resemblance to those of human institution, than is presented by the larger kinds of animals. In the societies of ants, bees, and wasps, we discover phenomena so curious and so wonderful, as to place, even in the shade, all that is related respecting any gregarious quadrupeds. In this minute and neglected class, are societies formed for almost every ordinary end of human communities. Some congregate to propagate the species, some for purposes of war and plunder, some for the accumulation and defence of property, and some for every purpose of attack and defence, of labour and hoarding, of protecting and instructing their offspring.

"Desire appears to stimulate them—love to allure them—fear to alarm them." They construct a habitation and store up food in it. They acknowledge the distinctions of rank and power, and know the value of the subdivision of labour.—They make slaves of one another, and carry on war for that purpose. They even capture and imprison insects of different kinds, to enjoy the benefit of their labour, or to reap the fruits of their savoury secretions. Thus the ants of certain families, obey a sovereign, and acknowledge an hereditary lord. Some of them are of the class of labourers, whilst others are devoted to war: some collect the supplies for their curiously constructed granaries, whilst others execute the functions of careful and patient nurses: and finally, there are those, who are never in action, save on the field of battle, and who afterwards depend entirely on the labour of the slaves, taken in war; and perish of hunger, if abandoned by their prisoners, rather than make the slightest exertion to procure a subsistence for themselves.

Thus the societies of white ants or termites consist of five different descriptions of individuals—"workers or larvæ—nymphs or pupæ—neuters or soldiers—males and females."

The workers are the most active and useful members of the community, constructing their complex edifices, collecting provi-

sions, waiting on the female, conveying her eggs to the nurseries, and feeding the young.

The neuters, of large dimensions, and few in number, armed with tremendous forceps, are the soldiers and sentinels of the *formicary*.

In each society, though consisting of thousands of individuals, there is but one male and one female, and they are of that privileged class, which knows no call to labour, and lives on the productive exertion of others. They are the parents of the race, devoted to pleasure, receiving unasked for homage, and supplied with food, beyond their most extravagant appetite. But, like their royal brother of China, they purchase pre-eminence by the loss of liberty; for, immediately after their *election*, the workers enclose them in an apartment, with apertures too small for the escape of the large and stately king and his spouse, though yielding easy entrance to the civil and military subjects of the tribe. In this apartment, which is gradually enlarged by the workers, and which is steadily guarded by the sentinels, the queen acquires a size equal to that of twenty or thirty thousand workers.*

Wasps form themselves into societies, which consist of females, males, and workers. All but a few females, perish on the approach of winter. Each female, happy enough to survive the rigours of the season, becomes the founder of a colony, erects a habitation, deposits the eggs, and performs, for the first brood, all the duties of protector, provider, and nurse.

"At length she receives the reward of her perseverance and labour; and from being a solitary unconnected individual, is enabled to rival the queen of the beehive, in the number of her children and subjects, and in the edifices which they inhabit—the number of cells in a vespiary, sometimes amounting to more than sixteen-thousand, almost all of which, contain either an egg, a grub, or a pupa, and each cell serving for three generations in a year."†

In time, other females are produced, and, with the original mother, assist the workers and males in the duties of the community. If, by any accident, she perish before other females appear, the neuters cease their labours, lose their instincts, and die.

While the workers are assisted by every member of the community in their habitation, none but they *sally out* in quest of food, which, on their return, they distribute with great impartiality.

Intermediate between the wasp and the honey-bee, the humble-bee is placed; for, unlike the wasp, it collects wax and honey, but does not construct cells of such matchless perfection as those of

* Our friend Dr. Say, a high entomological authority, confirms, after a patient examination, much that is written by Europeans respecting the habits of ants. One of our most respected friends, was an accidental witness of a very general and very destructive battle among these militant insects.

† Kirby and Spence.

the wasp and honey-bee. The humble-bees consist of large females, small females, males, and workers. The large females plant the colonies, and produce all the females and neuters, or workers, while the small females are the mothers solely of males or drones. Like the mother wasp, the female humble-bee is the sole survivor of the winter, and is therefore compelled to undergo all the labour of nursing and feeding the first brood of the spring. That brood consists chiefly of labourers, who, after they are matured, perform all out-door labour, though the males assist in repairing and extending the common habitation.

On a subject familiar to few general readers, this summary history of other gregarious insects seems necessary, as an introduction to that of the honey-bee. Without such a view, much that is to be stated, would appear incredible, though supported by numerous and unexceptionable witnesses. But when we find different persons, without concert, and at different periods, detecting analogical facts in various classes of insects, we feel less indisposed to admit such novel and startling assertions.

Although much has been said of the knowledge of bees, possessed by the ancients, it is certain, that until Maraldi, in 1712, invented glass hives, very little could be known of the in-door habits of these insect societies. What was stated by Aristotle, embellished by Virgil, repeated by Columella and Pliny, is but a tissue of erroneous conjecture. No sooner were glass hives invented, than the bee became the subject of patient and accurate investigation. Among the most prominent writers on bees, stands the great naturalist Reaumur, to whom "the genus *Apis* is under greater obligations than to any entomologist either of ancient or modern times." By him, and his industrious contemporaries, it was *ascertained*, that a society of honey-bees is divided into three classes of individuals—females or *queens*—males or drones, and workers, called neuters. The queen was supposed to be the sole mother of the hive, the parent of queens, drones, and neuters.

At this period, a new interest in the subject was created by a singular discovery made by Schirach, secretary of the Apiarian Society in Upper Lusatia, and vicar of Little Bautzen. He announced that bees, when deprived of their queen, have the power of selecting one or more grubs of workers or neuters, and, by an enlargement of cells and a change of food, of converting them into veritable females, having the authority, and performing the duties of queen-mothers of the hive. Such a declaration, so little in accordance with previous knowledge, was of course stoutly assailed by the ablest entomologists of the time; but the opinion of Schirach, founded on experiments often repeated, and by many persons, in various places, has been successfully sustained. At least it is certain, that larvae *in the cells of*

workers, may be so treated as to become queens. It is possible that the grubs thus selected may be misplaced queens, known to be such by the workers, and selected accordingly. But it is not necessary to make such an admission, since minute dissections, by Mademoiselle Jurine, have revealed, even in the neuters, ovaries and oviducts; but so slightly developed as to scarcely admit of demonstration. Some of the neuters, as they were called, have been detected in the act of depositing eggs, a faculty possessed by very few of them. Such eggs always produced males. As these workers have all the ordinary characters of their class, it is highly probable that Schirach and Huber have not been deceived in their well-devised and oft-repeated experiments.

If we experience difficulty in admitting, that, by any means, grubs of neuters may be converted into queens, having a structure, instincts, and faculties, entirely different from those of workers, are we not constrained to encounter as great a difficulty, in yielding assent to what is demonstrable, that workers, with all the external characters and ordinary instincts of that class, sometimes fertile, assume the most important duty of the queen, and become mothers of a portion of the hive. They have the basket, the hollowed thigh, and the rectilinear sting of the worker, and the ovaries, ducts, and maternal functions of the queen. They labour, and, by their fellows of the swarm, are held in no particular reverence; yet their issue partake of the fruits of the general industry, and are nurtured until they come forth to enjoy the easy life of drones.

It remained for the patient and ingenious Huber, to point out another distinction among the individuals of a hive. He discovered that the *workers* are divided into two classes, one destined to act as nurses of the young, and as collectors of the food of the hive, the other, co-operating partially in the out-door labour, but engaged chiefly in converting honey into wax, and hence called by him the "wax-workers."

In 1809, Huber called the attention of the Apiarian to another kind of bee, which appears to be only a casual inmate of the hive, and which is driven forth to starve, or is killed in conflict. The bee referred to, is less hairy, and of a much darker hue, than the ordinary workers; but, in other respects, closely resembles them. Its colour obtained for it the name of *black bee*. A careful examination of such bees by Mlle. Jurine, led to the discovery of *their* ovaries, and afterwards those of common workers, thus establishing a particular resemblance in every thing save colour. Huber supposes them to be defective bees. Kirby and Spence, with many others, conjecture that they are toil-worn, superannuated workers, of no farther use, and therefore sacrificed, because burdensome to a community which toler-

rates no unnecessary inmates. As, however, black bees are exactly alike, and appear in great numbers, in some seasons, and not at all in others, probably they owe their peculiarities to some congenital accident, such as varies the colour of other domesticated animals.

The *workers* of the hive, are so familiarly known as to scarcely merit a particular description. Four large, and comparatively strong wings, give them uncommon buoyancy and fleetness. The trunk is long and flexible; and the tongue, by means of which it laps its liquid food from the nectaries of flowers, is proportionally larger than that of any other insect. The hindermost of its six legs are hollowed out so as to afford a receptacle for the *farina* of flowers, and the resinous cement which the little labourers convey to their treasury. The stomach consists of two parts, connected by a tube, somewhat like the crop and gizzard of the gallinaceous animals. In the first apartment, the nectar of flowers is elaborated into honey, which, in due time, is disgorged into the cells of the comb; in the second, a portion of honey undergoes the action of the digestive powers, and is converted to the use of the labourer.

The only other part worthy of attention, is the sting with its appendages, the venom-bag and sheath.

"This curiously complex apparatus, which, in the bee, is used as a weapon both of defence and offence, is a hollow horny tube, or scabbard, enclosing two bearded darts, which can be thrust a short way beyond the sheath, though the whole apparatus appears to the naked eye like the solid point of the minutest needle."

"This apparatus is moved by muscles, which, though invisible to the eye, are yet strong enough to force the sting to the depth of one-twelfth of an inch, through the thick cuticle of a man's hand. It is articulated by thirteen scales to the lower end of the insect's body; and at its root are situated two glands or ducts, from which the poison is secreted: these glands, uniting in one duct, eject the venomous liquid along the groove formed by the junction of the two piercers. There are four beards on the outside of each piercer: when the insect is prepared to sting, one of these piercers, having its point a little longer, or more in advance than the other, first darts into the flesh, and being fixed by its foremost beard, the other strikes in also, and they alternately penetrate deeper and deeper, till they acquire a firm hold of the flesh with their hooks, and then follows the sheath, entering and conveying the poison into the wound." * *

"In consequence of the barbed form of its sting, the bee can seldom disengage itself without leaving behind it the whole apparatus, and even part of its intestines; so that *her* life is usually sacrificed to *her* passion."

"*Illis ira modum supra est, lææque venenum
Morsibus inspirant, et spicula, cæca relinquunt
Affixæ venis, animasque in vulnera ponunt.*"

VIRG.

The poison injected into the wound, together with the irritation arising from the presence of the sting, which is left behind, renders an injury of this kind very severe, and in some cases

* Bevan, pp. 278, 279.

even mortal. To extract the sting, should be the first care of one thus wounded. The liquid poison may be withdrawn by a cupping glass, or, if that be not at hand, a thimble will serve the purpose. Water of ammonia, or spirits of hartshorn, almost immediately relieves the pain, though it will not lessen the swelling. This, or any other alkali, seems to neutralize the poison, which is acid; as may be easily seen by causing a bee to sting a piece of litmus-paper. One who has been stung by many bees at once, should use the same remedy internally, as well as externally.*

For the information of the general reader, it may be well to offer a concise description of the antennæ of the bee.

"Of all the organs of insects, none appear to be of more importance than their antennæ; in all the tribe, they are planted between or below the eyes; and no insect has more than two: in their general structure, they consist of a number of tubular joints, each having a separate motion, which gives them every variety of flexure. The antennæ of the male have one more joint than those of the female, the former having thirteen, the latter only twelve. They seem to enable the insects, by certain signs and gestures, to communicate to each other mutual wants or discoveries."†

The antennæ are used for recognition of other insects, for exploration of cavities, and for various other purposes. According to Huber, ants communicate with each other chiefly by means of their antennæ. That bees also use antennæ for such a purpose, is well evinced by a decisive experiment of that eminent entomologist. By means of a grate so fine as to permit the circulation of air, but to prevent the passage of the antennæ of the bee, he divided a hive into two parts, in one of which was of course the queen. As is usual, on the loss of the queen, one party soon set about enlarging cells for the production of new queens. But when the apertures of the grate, all other circumstances being the same, were such as to permit the insertion of the antennæ, both portions of the subdivided hive continued quietly to pursue their usual labour.

* "In consequence of Pope Urban the Eighth being suspected of a stronger attachment to the French than to the Spaniards, a Frenchman, who had observed *three bees* quartered upon his arms, wrote this verse,

'Gallis mella dabunt, Hispanis spicula figent.'

"To this a Spaniard subjoined,

'Spicula si figant, emorientur apes.'

"The pope is said to have concluded with,

'Cunctis mella dabunt, et nullis spicula figent,
Spicula rex† etenim figere nescit apum.'‡§

† Bevan, pp. 255—6.

† The ancients, and the naturalists of the middle ages, esteemed the ruler of the hive a *masculine personage*.

§ The queens, frequently caught, and even roughly dealt with, never use the sting. This royal weapon is employed solely in the execution of royal victims.

"The amputation of one antenna produces no effect, but if both be cut off near the root, the bee no longer possesses the power of guiding itself; it cannot direct its tongue to receive food from its companions, nor take any share in the operations of the family; but exhibits perfect indifference, and keeps near the entrance, apparently for the sake of light; when that is withdrawn, it soon leaves the hive to return no more."^{*}

Huber ascribes their departure to the loss of that sense which guides them in the dark.

The great difficulty of ascertaining the true use of the antennæ, may be learned from the variety of opinions held by the highest authority. Kirby and Spence inclined to think them ears, others have supposed them eyes, many esteem them organs of smell, while the greater part of entomologists regard them as feelers, endowed with a delicate faculty of touch.

Huber, in speaking of the antennæ of the queen, remarks, "That the amputation of one did not affect her instinct; but if both were cut off near the root, these privileged beings, these mothers so much the object of consideration, lost all their influence; even the instinct of maternity disappeared: their eggs were not deposited in cells; their mutual animosities also were forgot; they passed close together without recognising each other, and the workers themselves seemed to participate in their indifference." Such facts evince that the antennæ of both parties, to a recognition, are necessary, and that it is not alone the mutilated one which loses the power of knowing others. Now, we know of no organ, except that of touch, which both gives and receives intelligence at the same time. Ear cannot speak to ear, nor olfactory to olfactory.

Bees have eyes which enable them to see well at a distance; but which are nearly useless, in the survey of proximate objects. This is inferred, from the rectilinear flight of the insect, and the blundering course pursued by it, when it alights on the hive-stand. In the Philosophical Transactions for 1721, is given a curious account of the method practised in New-England, for discovering the hive of the wild-bee of the woods. The bee-hunter decoys, by a bait of honey, some of the bees into his trap, encloses them in a tube, and letting one fly, marks its course, by a pocket compass. Departing to some distance, at right angles to the bee-line just ascertained, he liberates another, observes *its* course, and thus determines the position of the hive, which lies in the angle made by the intersection of the bee-lines. "Lining a bee to its hive," is an expression familiar to the American reader; for he has, in vivid recollection, the exciting tale of the "Prairie."

The *drone* differs from the worker, in size, for he is much

* Bevan, p. 309.

larger ; in industry, for he performs no labour ; in unfitness for aggression or defence, for he carries no sting.

The *queen*, distinguished by her superior size, and dignified carriage, her short and feeble wings, her long and *curved* weapon, her higher colour, and the care, attention, and respect of her numerous subjects, is seldom seen by the apiarian, except in the hive of glass, or at the head of a swarm, when a colony is sent forth from the parent-hive. One of our most eminent apiarians, a lady of New-Brunswick, N. J., in a close watch from grey dawn to sunset, for ten weeks, did not see the queen make an excursion from the hive.

The queen, and certain fertile workers, are the only mothers of the hive, and they are oviparous. The eggs, productive of workers, are laid in common cells ; those which form drones, in larger cells ; while those from which royal insects are to spring, are deposited in apartments of a totally different form and structure.

Not the least curious part of the history of the queen, is that which treats of the effect of retarded impregnation. If the retardation be continued until the twentieth or twenty-first day of her life, "instead of first laying the eggs of workers, and those of drones at the usual period afterwards, she begins, from the forty-fifth hour, to lay the latter ; and lays no other kind, during her whole life."* The effect of retardation, is thus stated by Huber :—"The bodies of those queens, whose impregnation has been retarded, are shorter than common ; the extremities remain slender, while the first two rings next the thorax, are uncommonly enlarged. Thus, in disposing themselves for laying, the extremity cannot attain the bottom of the cells, on account of the swollen rings ; consequently, the egg must remain attached to the part reached by it." He also informs us, that, losing her instinctive knowledge of appropriate place, the retarded queen deposits the eggs of drones in royal cells, or in those of workers and drones, indiscriminately. The observant workers, soon discover the altered state of the affairs of their colony, lose their wonted regard for their drone-producing regent, sacrifice her in despair, and abandon the hive in which they could no longer hope for a productive offspring.

In a few days, the egg of a drone, or worker, produces a worm or larva ; which, fed on the pollen of flowers mixed with a little honey, called "bee-bread," after a space of from three to six days, encloses itself in a cocoon, and remains, for some time, in the state termed pupa, or aurelia ; and then, issuing from its woven tomb, exhibits the lively, useful, winged insect, in its

* Bevan, p. 40.

full development. The worker appears on the twenty-first day ; the drone, on the twenty-fifth, and the queen, on the sixteenth.

The food of the royal larva, is termed "royal jelly;" and is a pungent acidulous substance, entirely different from common bee-bread. Fertile workers are supposed to owe their developed ovaries to the accidental use of a small portion of royal jelly, because a worker's grub, three days old, fed exclusively on it, becomes a queen in all respects.

The birth of a queen, is an important event in the hive ; for, on her, depend the future welfare, and even existence of the society. According to the best authority, the nascent queen finds herself in undisputed possession of the government, as her predecessor and parent, guided by unerring instinct, leaves the hive, at the head of a swarm, a few days or hours before her birth. The very first act of authority, on the part of the new sovereign, and indeed the act of the first hour of her existence, is one of apparently unnatural severity. Diligently exploring the royal cradles, she inserts into each, her long curved sting, and kills every royal pupa. Often, the workers endeavour to prevent the deadly act :—

"No sooner," says Huber, "does she approach, than the bees bite, pull, and harass her, so that she is forced to remove ; but the royal cells being numerous, scarce can she find a place of rest. Incessantly animated with the desire of attacking the other queens, and as incessantly repelled, she becomes agitated, and hastily traverses the different groups of workers, to which she communicates her disorder. At this moment, numbers of bees rush towards the aperture of the hive, and, accompanied by the young queen, forsake it, to seek another habitation. After departure of the colony, the remaining workers set another queen at liberty, and drive her from the royal cells ; she also, perpetually harassed, becomes agitated, departs, and carries a new swarm along with her. In a populous hive, this scene is repeated, with the same circumstances, three or four times during summer."

When the bees, having sufficient room, do not go off in swarms, the new queen either kills her sisters, before they emerge from their cells ; or destroys them in single combat, after they come forth.

In these combats, the workers take no part ; but, when a stranger of royal degree, is put into a hive, they immediately surround her, cling to her, and, finally, either suffocate her, or starve her to death. Huber supposed, that, even in this case, the stranger was killed by the reigning queen, while Rheim and Schirach ascribed her death to the weapons of the workers ; but the minute investigations of the Rev. W. Dunbar, revealed the more inglorious cause of destruction.

That such is the mode of destroying her, is proved even by Huber's experiments. On the loss of a queen, if a stranger be introduced within twelve hours, she is soon found dead. If less than eighteen hours have elapsed, she is at first imprisoned ; but finally escapes, and governs the hive. After an interregnum of

twenty-four hours, the new queen is joyfully and instantly received, and admitted to the sovereignty of the hive.

No part of the natural history of the bee, is more interesting, than that which relates to its attachment to the queen. The reader, who is desirous of perusing at length, what is well said by Bevan, on this subject, will not find it where it should be placed ; but, as often happens with our author, in a section apparently devoted to another division of his subject :—

“Dr. Warder being desirous of ascertaining the extent of the bees’ loyalty to their sovereign, ran the hazard of destroying a swarm, for that purpose. Having shaken on the grass, all the bees from a hive, which they had only tenanted the day before, he searched for the queen, by *stirring* amongst them with a stick. Having found and placed her, with a few attendants, in a box, she was taken into his parlour ; where, the box being opened, she and her attendants immediately flew to the window, when he clipped off one of her wings, returned her to the box, and confined her there for above an hour. In less than a quarter of an hour, the swarm ascertained the loss of their queen, and, instead of clustering together in one social mass, they diffused themselves over a space of several feet, were much agitated, and uttered a plaintive sound. An hour afterwards, they all took flight, and settled on the hedge where they had first alighted, after leaving the parent-stock ; but, instead of hanging together like a bunch of grapes, as when a queen is present, they extended themselves along the hedge, in small bunches of forty, or fifty, or more. The queen was now presented to them, when they all quickly gathered round her, with a joyful hum, and formed one harmonious cluster. At night, the Doctor hived them again ; and, on the following morning, repeated his experiment, to see whether the bees would rise ; the queen being in a mutilated state, and unable to accompany them, they surrounded her for several hours, apparently willing to die with her, rather than desert her in her distress. The queen was a second time removed, when they spread themselves out again, as though searching for her : her repeated restoration to them, at different parts of their circle, produced one uniform result ; and these poor, loyal, and loving creatures, always marched and countermarched every way, as the queen was laid. The Doctor persevered in these experiments, till after five days and nights of (voluntary) fasting, *they all died of famine*, except the queen, who lived a few hours longer, and then died. The attachment of the queen to the working bees, appeared to be equally as strong as their attachment to her ; though offered honey, on several occasions, during the periods of her separation from them, she constantly refused it, disdaining life, without the company of her subjects.”

Huber thus describes the effect of the removal of a queen :—

“Bees are not immediately aware of the removal of their queen ; their labours are uninterrupted ; they watch over the young, &c. But in a few hours agitation ensues ; all appears a scene of tumult and confusion. A singular humming is heard ; the bees desert their young, and rush over the surface of the combs with delirious impetuosity.”—“I cannot doubt that the agitation arises from the workers having lost their queen ; for, on restoring her, tranquillity is instantly regained among them ; and what is very singular, they *recognise* her : you must interpret this expression strictly. Substitution of *another* queen is not attended with the same effect.”

Even the dead body of their queen, is a subject for the respect and affection of the workers ; and they have, according to Huber, preferred “the inanimate corpse to any living queen.” Dr. Evans relates the following affecting anecdote. A queen in a

* Bevan, p. 140, et sequent.

thinly peopled hive, lay on a comb apparently dying. Six workers surrounded her, seemingly in intent regard, quivering their wings, as if to fan her, and with extended stings, as if to keep off intruders or assailants. On presenting honey, all the bees *except the guards*, partook of it; but they, absorbed in their mournful duty, disregarded the proffered banquet. On the following day, the queen, though lifeless, was yet surrounded by her guard: and of this faithful band of followers, not one deserted his post, until death came kindly to extinguish both his affection and his grief. Our friend Professor Thomson, relates, that having separated a part of a *sectional* hive with its honey, he covered the hive as usual, and conveyed the separated portion to a dark room in his house. The queen happened to be in the part removed. After several days, he found the bees which it contained, at work on the combs, though the box lay in an inverted position, and open at the top. Through a small aperture between the window shutters, they had gone out, and come in, and were content to reside with their queen in a dark chamber, and in a roofless box. The bees left in the *hive*, soon discovered the loss of the queen, and kept lounging and clustering about the box, apparently without spirit and without aim. The restoration of the section with the queen, reanimated them, and the business of the society again proceeded as usual.

After what has been already related, the history of the working bees may be easily told. "The young bees break their envelope with their teeth, and, assisted by older bees, proceed to cleanse themselves from the moisture and exuviae, with which they are surrounded; this operation being completed, they begin to exercise their functions, and, in a few minutes, are gathering provision in the fields, loading, 'In life's first hour, the hollowed thigh.'" Huber supposes that the bee does not go forth to the fields for nearly two days after its birth; but the weight of authority is decidedly against his opinion. Miraldi, Wildman, Evans, Bevan, and others, have seen this busy little creature, doing its field-duty on its first birth-day. In its crop, it imports the nectar of the flowers, on its thighs, it conveys the pollen and the *propolis*, the cement or varnish of its home; and, on its abdominal segments, it bears the organ by which the wax is secreted from its circulating fluids. The pollen and propolis are entirely vegetable products, the honey is a slightly altered vegetable nectar, and the wax is a purely animal secretion.

That wax is an animal secretion, is proved not only by the demonstration of the existence of the organ by which it is produced, but also by experiment. Huber and others have confined bees to a food consisting entirely of honey or sugar, and the combs have been formed by them as usual; differing from other combs, only in superior whiteness.

Mr. Wistar, of Germantown, mentions two facts conclusive on this subject.

"I had," says he "a late swarm last summer, which, in consequence of the drought, filled only one box with honey. As it was late in the season, and the food collected would not enable the bees to subsist for the winter, I shut up the hive, and gave them half a pint of honey every day. They immediately set to work, filled the empty cells, and then constructed new cells enough to fill another box, in which they deposited the remainder of the honey."

A more interesting proof, is thus related by the same gentleman.

"In the summer of 1824, I traced some wild bees, which had been feeding on the flowers in my meadow, to their home in the woods, and which I found in the body of an oak tree, exactly fifty feet above the ground. Having caused the entrance to the hive to be closed by an expert climber, the limbs were separated in detail, until the trunk alone was left standing. To the upper extremity of this, a tackle-fall was attached, so as to connect it with an adjacent tree, and, a saw being applied below, the naked trunk was cut through. When the immense weight was lowered nearly to the earth, the ropes broke, and the mass fell with a violent crash. The part of the tree which contained the hive, separated by the saw, was conveyed to my garden, and placed in a vertical position. On being released, the bees issued out by thousands, and though alarmed, soon became reconciled to the change of situation. By removing a part of the top of the block, the interior of the hive was exposed to view, and the comb itself, nearly six feet in height, was observed to have fallen down two feet below the roof of the cavity. To repair the damage, was the first object of the labourers; in doing which, a large part of their store of honey was expended, because it was at too late a season to obtain materials from abroad. In the following February, these industrious, but unfortunate insects, issuing in a confused manner from the hive, fell dead in thousands, around its entrance, the victims of a poverty created by their efforts to repair the ruins of their habitation."

The bees designed to produce wax, when it is in request for the construction of combs, do not labour, but, fed *by labourers*, hang in clusters indolently in the hive; and each, as it becomes charged with wax, issues from the crowd, and proceeds to deliver its load to the architects who are constructing the cells.

Less attention has been paid to the drones, than to the more useful members of the hive. Born for the sole purpose of rendering the queen prolific, and incapable of labour, they have no sooner performed their single task, than they are doomed to a violent and premature death.

"Towards the end of July, a general massacre of the drones takes place. Love is at once converted into furious hate. The unfortunate victims evidently perceive their danger; for they are never, at this time, seen resting in one place, but darting in or out of the hive, with the utmost precipitation, as if in fear of being seized. Their destruction has been generally supposed to be effected by the workers harassing them till they quit the hive: this was the opinion of John Hunter and Bonnet."

Huber, by placing his hive on a glass table, was enabled to witness the work of destruction, and *saw* that it was done by the sting. Whatever may be the cause of this destructive impulse, it is operative only when the drones can be of no farther use;

for if the queen is lost, or, by *retardation*, creates only males, the massacre is delayed until a fertilized queen is produced, and then the males are slaughtered.

The *architecture* of honey-bees, has been a subject for the admiration of every one who has observed the perfect regularity of their hexagonal cells; and who has not seen a honey-comb? Few, however, are aware of the ingenious modifications in the plan, suggested by circumstances, or enforced by necessity. In passing from the formation of small cells, to those of larger size, the transition is effected by constructing cells, which, instead of being bottomed by three rhomboidal plates, as is usual, are closed at the base by two rhombs and two hexagons, which continually vary in proportion, until the required size is obtained. The diameter of the cells, for any one kind of bee, never varies—that of the drones, is 3 1-3 lines—that of the workers, 2 3-5 lines. These are, says Reaumur, the invariable dimensions of all the cells, that ever were, or ever will be made:—

“ While heaven-born instinct bounds their measur'd view,
From age to age, from Zembla to Peru,
Their snow-white cells, the order'd artists frame,
In size, in form, in symmetry, the same.”—EVANS.

Different species of bees, build cells of different kinds. The little stingless black bees of “Guadaloupe, build in hollow trees, or in the cavities of rocks, by the sea-side; where they lay up honey in cells about the size and shape of pigeons' eggs. These cells are of a black or deep violet colour, and so joined together, as to leave no space between them. They hang in clusters, almost like a bunch of grapes.”

Captain Basil Hall, gives the following account of the combs of the South American bee:—

“The hive we saw opened, was only partly filled; which enabled us to see the economy of the interior to more advantage. The honey is not contained in the elegant hexagonal cells of our hives, but in wax-bags, not quite so large as an egg. These bags, or bladders, are hung round the sides of the hive, and appear about half full; the quantity being probably just as great, as the strength of the wax will bear, without tearing. Those near the bottom, being better supported, are more filled than the upper ones. In the centre of the lower part of the hive, we observed an irregular-shaped mass of comb, furnished with cells, like those of our bees, all containing young ones, in such an advanced state, that, when we broke the comb, and let them out, they flew merrily away. During this examination of the hive, the comb and the honey were taken out, and the bees disturbed in every way; but they never stung us, though our faces and hands were covered with them. It is said, however, that there is a bee in the country, which does sting; but the kind we saw, seem to have neither the power nor the inclination, for they certainly did not hurt us; and our friends said, they were always ‘*muy manso*,’ very tame, and never stung any one. The honey gave out a rich aromatic perfume, and tasted differently from ours, but possessed an agreeable flavour.”

At times, the frail walls of wax give way, and require various remedies, all of which are applied by the ingenious insect, with surprising skill.

"A very striking illustration of the reasoning power of bees, occurred to my friend, Mr. Walond. Inspecting his bee-boxes, at the end of October 1817, he perceived that a centre comb, burthened with honey, had separated from its attachments, and was leaning against another comb, so as to prevent the passage of the bees between them. This accident excited great activity in the colony; but its nature could not be ascertained at the time. At the end of a week, the weather being cold, and the bees clustered together, Mr. W. observed through the window of the box, that they had constructed two horizontal pillars, betwixt the combs alluded to; and had removed so much of the honey and wax, from the top of each, as to allow the passage of a bee: in about ten days more, there was an uninterrupted thoroughfare; the detached comb, at its upper part, had been secured by a strong barrier, and fastened to the window with the spare wax. This being accomplished, the bees removed the horizontal pillars first constructed, as being of no farther use."*

In the chapter on "Instincts of Bees," from which the anecdote just told, was extracted, Bevan relates many surprising instances of sagacity and ingenuity. To this chapter, the curious reader may refer, for a very pleasing account of the habits of this intelligent insect. Huber's elegant treatise also, contains some singular illustrations of the capacity of the bee, to adapt its architectural powers to the peculiar exigencies of its circumstances. When robbed by the large and powerful *sphinx atropos*, or *Death's head hawk-moth*, the bee constructs, at the entrance of its hive, a set of arches and covered ways, through which the enemy cannot enter, and which admit the ingress of the bee itself. When the danger is past, and the business of the hive demands a more spacious door, its waxen arches immediately disappear, and the busy citizens are seen thronging an unobstructed portal.

In other cases, they resort to this talent, to imprison an enemy, or to confine a nuisance. Reaumur relates, that a snail having found its way into one of his hives, the bees formed a border of propolis round the verge of the shell, which was, at last, so securely fixed to the glass, as to become immoveable, either by the moisture of the air from without, or by the snail's secretion from within.

By Miraldi, we are told, that a *shellless* snail or slug, killed by the bees, after an intrusion of the same kind, not being, because of its weight, susceptible of removal, was not only glued down, as in the former case, but actually covered all over with an impervious coat of propolis, by means of which, it was both confined and entombed:—

"Embalm'd in shroud of glue, the mummy lies,
No worms invade, no foul miasmas rise."—EVANS.

Such instances of apparent sagacity, lead us naturally to inquire into the source, from which spring actions, so like those deducible from reason. Most writers refer *all* the acts of the lower animals, to instinct, a power dependent on nice mecha-

* Bevan, p. 326.

nism ; perfect, when the machine is completely formed ; unsusceptible of improvement, by time or experience ; operating on the means, without anticipation of the end ; incited by no hope, and controlled by no foreboding.

The religionist adopts this opinion, lest he should, by conceding the existence of a mind, afford claim to a share in a future state, promised to man alone, and yield to his sceptical opponent, an argument against his own immortality. The free-thinker embraces it, because it furnishes him with an ostensive objection to the reality of that futurity, which he dreads and denounces ; and the pseudo philosopher, in the pride of his heart, denies to the oyster and the beetle, any share of that reason, which he claims, as the exclusive privilege and highest glory of *his* race. But for the numerous prejudices, which cloud the understanding in reference to this subject, we should easily discover, in the history of the bee, and other social animals, evidence of the possession both of reason and instinct ; nay, we should admit, that these two powers are commonly in inverse proportion ; instinct being strongest, when reason is most feeble ; and reason then most potent, when instinct exercises the slightest influence. The infant of a day, seems guided solely by instinct ; while every vestige of this curious faculty is lost, in the matured spirit of a Newton, or a Franklin. We discover hardly an instance of ratiocination in an oyster ; but we see many actions of the dog, the horse, and the elephant, for which we can account, solely by admitting the possession of reason. So, in the class of social insects, the proofs of the exercise of reasoning faculties, are wonderfully multiplied. That the bee moulds its invariable cells, by instinctive impulse, may be admitted ; but we are totally unable to conceive, that such a power causes it to prop its fallen comb with horizontal pillars ; to erect new kinds of defences, against the inroads of new enemies ; and to continually modify its actions, according to the varying exigencies of its condition. The whole history of the ant, refutes the assertion, that *it* possesses no reason. Its actions are such, as we should, in our own race, refer to that power ; and wherefore not assign such a faculty to it. Nor have we any cause to dread such an admission, whether in reference to our supremacy or our faith. Truth is never incompatible with truth ; and that which is demonstrable, is not, in any instance, at variance with any other demonstrable thing. Neither can we safely rest a belief of its immortality, on any of the known properties of the soul. The light of nature, sheds no ray on the dark recesses of the world to come ; nor can *unaided* reason, do more than invent sophisms, to flatter that “longing after immortality,” which clings so firmly to our hearts. Deriving our only *sound* arguments on this subject, from the *Revelation* of an unerring, and all-seeing

Guide, we are not compelled to reject any natural truth, lest, by unfair deductions from it, our flimsy fabrics of *natural theology*, should be shaken to their foundations. The soul of man is immortal; and that of the brute perishes, because He who made them both, has so willed it; and the *intelligence* of the destination of each, comes from Him.

A considerable part of the interesting volume of Bevan is devoted to the subject of the *practical management* of bees. Nearly the whole of Souder's little tract is occupied by the same subject; and, though the volume of Bevan be learned and full, that of Souder conveys information much better adapted to the climate of the middle states.

Bevan recommends bee-houses, whereas our most skilful apiarists prefer open and airy sheds.

"In choosing a situation," says Souder, "all low and marshy places ought to be avoided, and all places where smoke or steam is raised. A bee stand ought never to adjoin a barn, smith-shop, or any other place from which a tremulous motion might be communicated to the hives, as, in winter especially, it is extremely hurtful to bees. A stand ought always to be so placed, if possible, that the bees may enjoy the morning sun in summer, and be screened from the most piercing winds in winter."

There is a curious difference of opinion among apiarists as to the best aspect for an apiary. Some prefer the south, some the west, and a few agree with Souder in the choice of the east. These discrepancies, in a question of practice, render probable the opinion of Milton, who says—

"It is not material in what aspect the stock stands, provided the sun shines on the hive once in the course of the day, for that *well-peopled* hives *kept dry*, will thrive in most situations."

"To those who, residing in towns," observes Bevan, "may consider it as indispensable to the success of an apiary, that it should be in the *immediate* vicinity of good pasturage, and be thereby deterred from benefiting and amusing themselves by keeping bees; it may be satisfactory to learn, that the apiary of the celebrated Bonner was situated in a *garret*, in the centre of the city of Glasgow, where it flourished for several years, and furnished him with the means of making many interesting and valuable observations, which he gave to the world about thirty years ago."

The bee-boxes preferred by Bevan are those of Keys, in the frontispiece of whose work, they are represented. As no one in our neighbourhood now uses such, it is not important to notice them more particularly. In the immediate vicinity of Philadelphia, the *sectional* boxes of Christ are employed almost exclusively. They differ from other sectional hives, in having the sections of very moderate height, so that a small quantity of honey may be removed at a time. Charles Wistar, Esq. of Germantown, who uses Christ's boxes, makes them of three-fourth-inch white pine, thirteen inches square on the outside, and five inches deep. The hive consists of several of these boxes placed one on another, the upper one being covered, and the lowest raised, during the whole

year, an inch above the hive-stand, by means of four small blocks placed at the angles. By thus elevating the hive, the wind assists in keeping the bottom boards clean : and very small birds, not destructive to bees, are able to enter, and pick up dead larvæ. Mr. Wistar having found some difficulty in preventing moths from depositing their eggs in the interstices between the boxes, applied a mixture of whiting and lard, which effectually excludes the eggs of the moth, and does not become so hard as to impede the entrance of the *dividers*.

The excellent hive, invented and successfully employed for a number of years, by Mrs. Mary Griffith, of New Brunswick, N. J., is likely soon to supersede every other now in use. One gentleman in this neighbourhood has combined the sectional hive of *Christ* with that invented by Mrs. Griffith, and promises himself very advantageous results.

The following description of her hive, is from the pen of the inventress :—

“The Charlieshope hive, is thirteen inches square at the top; *but as the sides decrease in width to the bottom*, the base is narrower, being only seven inches on the flanks, and thirteen inches in front and at the back. The hive is in height about twenty-six inches in front, and twenty behind. Of course, the floor is an inclined plane. It is fastened behind with hinges, and at the sides with hooks and staples. The roof or cover is, like the rest of the hive, made of common inch board, with cleats screwed on the top, to prevent it from warping. The top is screwed to the hive in two places. Three holes are bored in this cover, of one inch diameter, and about a quarter of an inch apart, on a line with each other, and parallel with the front of the hive. Three holes are found to be necessary, as the bees would otherwise build in such a manner as to close them and prevent their ascent to the upper box, when that becomes necessary. The under part of the top or cover is *rough*, as the *propolis* or bee-glue does not, at all times, adhere sufficiently well to a smooth surface. Every other part of the hive is as smooth as possible, and the whole hive, box and all, is well made and joined. The upper box is thirteen inches square, and the width of a board deep, from eight to ten inches. This box is likewise smoothly planed, excepting the inside of the top board, which is rough.

“The box sits snugly on the top of the hive; the cleats are placed in such a manner on the upper surface of the cover, as to fix the box firmly.

“When it is ascertained that the hive is full of honey, the plugs in the three holes are taken out. The bees may then ascend, and if the season be favourable, they will fill the box with comb and honey.

“About three or four inches from the top of the front and back of the hive, are two cleats, which serve to sustain the hive in a moveable frame, made of narrow slats of wood, which frame enables any one to carry the hive from place to place, as the hiving and other operations make it necessary. The hives are likewise suspended by these cleats, on permanent joists or scantlings in the apiary.

“Hives thus suspended, are out of the reach of mice, and they are, too, better, on a variety of accounts. The opening and shutting of the floor allows of daily inspection. The floor can be cleaned often. The inclination of the sides and bottom allows the perspiration of the bees to flow off rapidly. This is a great point gained, as dysenteries are induced by the absorption of such acrid matter. The slope in the floor enables the bees to remove all extraneous matter, and to defend themselves better from robbers and intruders.

“The entrance to the hive is about three inches wide, and half an inch high. A door of wire, the meshes of which are small enough to prevent the entrance of the miller, rests behind two door posts made of needles. These needles are

driven into the floor close to the entrance. The little doors are always put behind the needles as soon as the bees are in for the night ; and they are removed at day-light. About the middle of April, the doors are first used ; and they are discontinued in two months. After the middle of June, the floors are let down, and are suffered to hang until day-light, when they are *gently* raised up and hooked."

The inclination of the sides of the Charlieshope hive is borrowed from that of the Greeks, whose circular hives were made narrower towards the bottom, so as to afford a better support to the combs, the falling down of which not only causes inconvenience to the bees at the time, but directs their labour into a less productive channel.

We perceive that the Rev. Mr. Walond interposes perforated boards between the sections of his hives, an addition, but not apparently an improvement, in that kind of hive, but essential to the utility of the Charlieshope hive.

The only improvement in bee-boxes suggested by Bevan, indeed the only novelty in his learned book, is relative to the entrance to the hive. Instead of cutting a hole in the lower edge of the box, as is usual, he makes a groove in the board on which the hive stands, and thus enables the Apiarian to place his boxes upon his stands, *in any direction*, and renders sliding shutters unnecessary appendages of the sections.

The Mexican bee-hives, described by captain Basil Hall, are suspended by cords, instead of resting on stands.

"The hive," he observes, "is generally made out of a log of wood, from two to three feet long, and eight or ten inches in diameter, hollowed out, and closed at the ends by circular doors, cemented closely to the wood, but capable of being removed at pleasure." "Some persons use cylindrical hives, made of earthenware, instead of the clumsy apparatus of wood ; these are relieved by raised figures and circular rings, so as to form rather handsome ornaments in the verandah of a house, where they are suspended by cords from the roof, in the same manner that the wooden ones in the village are hung to the eaves of the cottage. On one side of the hive, half-way between the ends, there is a small hole made, just large enough for a loaded bee to enter, and shaded by a projection, to prevent the rain from trickling in. In this hole, generally representing the mouth of a man, or some monster, the head of which is moulded in the clay of the hive, a bee is constantly stationed, whose office is no sinecure, for the hole is so small he has to draw back every time a bee wishes to enter or leave the hive. A gentleman told me that the experiment had been made, by marking the sentinel, when it was observed that the same bee continued at his post a whole day.

"When it is ascertained, by the weight, that the hive is full, the end-pieces are removed, and the honey withdrawn."

The chapter written by Bevan on the "Hiving of Swarms," proved unexpectedly amusing ; for we found in it much that we have extracted relative to the queen, and less than is usually found in works on the bee, respecting the mode of hiving. *Christ* brings down the bees by throwing water from a pipe high into the air, so as to imitate rain, and, after they settle, thoroughly wets them by sprinkling water on them with a broom

or brush. This mode was practised by Keys. All other methods will be found entirely ineffectual, though tin kettles, and other rustic musical instruments, are yet in vogue in many places.

As a well-peopled hive is alone prosperous, weak stocks are often profitably united. To accomplish this, various measures have been suggested to overcome, what is the greatest difficulty, the hostility of the bees of different hives. Some intoxicate them, some immerse them in water, and some, like Wildman, act on their attachment to the queen. The Rev. Richard Walond has suggested the easiest mode of reconciling these insect-enemies.

"He procured a plate of tin, of the size of a *divider*, and thickly perforated with holes, about the size of those in a coarse nutmeg-grater. Having confined in their respective hives, or boxes, the two families to be united, and placed them over each other, with only a divider between them, he introduced his perforated tin plate, and withdrew the divider. Immediately the bees began to cluster with hostile intentions; one family clinging to the upper, the other to the under side of the perforated plate, when, after remaining in this state for about twenty-four hours, the bees, the plate being removed, mingled together as one family, no disturbance being excited, but such as arose from the presence of two queens; the custom being always, in such case, to dethrone one of them."

Mr. Walond ascribes the success of this experiment to the production, by confinement, of a *common* odour, each swarm having, as he supposes, a peculiar smell, by which its individuals are known to each other.

A great deal has been written relative to the *enemies* of bees. With common care, in hives such as are used by Souder, or still better those of Mrs. Griffith, the bee suffers but little from the assaults of its adversaries. The birds which devour may be destroyed; cleanliness will prevent the access of the moth, and the occurrence of dysentery; mice cannot reach them on a well constructed stand, and when they plunder one another, for they are bold and destructive robbers, it is easy, by means of a contrivance suggested by *Christ*, to catch the marauders, and make them labour in the service of the community whose ruin they meditated.

At their first appearance, the robbers keep hovering timorously about the passage, venturing still nearer and nearer, until they at last attempt to mix among the guard, which, however, repulses them with great courage; if the attack be considerable, the guard is immediately increased; the robbers, however, are not discouraged, but come in greater numbers, and while the sentinels are combating some, others will slip in, fill themselves, and push off; for having once passed the guard, they are seldom persecuted within the hive. Having succeeded so far, they come in more formidable numbers, still appearing to possess the courage and fierceness of lions, neither regarding stings nor bites, but prosecute their destructive business with the greatest fury. A general carnage soon ensues, and if the robbers can effect a general entrance into the hive, they murder the queen; when all resistance immediately ceases, and the disheartened inhabitants suffer themselves to be robbed with impunity; and frequently help to pack up the remains of their provision—unite with the enemy, and go home with them. The robbers, having succeeded in obtaining the contents of one

hive, will soon attack another; and so on, until the evil becomes epidemic, and whole stands, yea! whole neighbourhoods, are involved in one common ruin.

"To prevent this complicated mischief, the careful economist will keep a watchful eye over his bees, from the time they first fly abroad in the spring, until there is full nourishment for them in the fields; after this, they seldom think of robbing, until their pasture begins to grow scanty in the fall; when their propensity for thieving again revives, and the same care must be had over them as in the spring.

"The best time to know whether robbers are at work, is early in the morning, or late in the evening. If bees are seen coming in, in the morning, before other hives are gone to work, or flying away after the rest have shut up shop, your hive is robbed; but if they fly out before the common time in the morning, or come home too late in the evening, *your hive is the robber*; and it becomes you, as an honest man, to remove the hive at least thirty yards from its former stand; by this you may save your neighbour's hive from ruin—save a great deal of trouble—and have the pleasure of having done, what every good neighbour ought to do. But should *your hive be attacked*, and you observe it in the beginning, you may assist your bees, by closing down the outside slider, leaving no passage except the notch in the slider, at the same time drawing back the bottom board so far that the front end thereof be flush with the front of the hive; this will give the sentinels such an advantage over the robbers, that they frequently oblige them to give up the undertaking.

"But should this expedient fail, and your people be in danger of being worsted withal, the matter then becomes serious, and effectual measures must be adopted to stop the evil.

"For this purpose, the hive must be visited, early in the morning, before any bees are abroad; the perforated slider carefully closed down, and several of the outside sliders drawn up, so that the bees may have sufficient air, and yet be completely shut in: in this position, the hive must stand, until after sun-rise, when the robbers will attend in great numbers. Then powder the visitors completely with chalk finely ground, and observe their flight; if any of them are seen entering into a hive of your own, you have found the robber, who must be taken and set in the place of the hive he intended to rob, and the other in the place of the robber; this will instantly put an end to the robbery. But should the robbing bees belong to a neighbour, and you can find them out, request your neighbour to remove his hive some distance from its former stand. Should this be done, and the robbers afterwards come back, the two hives must then be exchanged until fall, when they may be returned to their own places with the greatest safety. Or if you buy the robber, and set him in the place of your own hive, it will answer the same purpose. But should neither of these ways be practicable, then self-preservation becomes the only law, and the robbers must be rewarded according to their works. For this purpose, a small quantity of white hellebore root must be got from the apothecary, finely powdered, and mixed with some honey and water. This mixture is then put on a plate, the plate set on a bottom board, and a number of boxes turned over it, similar to that of a defending hive. Next morning, about the break of day, remove your hive to some distance, and set the boxes, with the mixture, exactly in its place; the perforated sliders of every hive in your possession must then be carefully closed down, and the door of the boxes which contain the mixture left wide open. The robbers will attend at a very early hour, and feast on the dainties provided for them; but will soon kick their last, and be no more. About an hour before sun-set, the door of the empty hive must be closed, and the sliders of all the other hives drawn up, in order to let the bees fly out to air themselves, otherwise they will defile themselves, and sustain a considerable injury. The day following, this may be repeated; by which time the robbing hive will be so depopulated by the loss of bees, that they will be obliged to give up the undertaking. Or place the boxes as before, but instead of the mixture, set in pure honey mixed with water; let down the outside slider so as to leave an opening to admit light, but not so much as to admit a bee. In the notch of the slider, place a tube about the size of a weaver's quill, and about five inches long, fitted in such a manner that no bee can enter but through

the tube, which must be flush with the slider on the outside, and raised in the inside about one inch from the bottom board. Through this tube the bees will enter, but instead of returning by the same way, they will endeavour to force themselves out at the small opening below the slider. When in this manner you have caught a sufficient number of the banditti, you may either burn them, or unite them with one of your own hives, without the least danger of their contaminating your bees with their thievish principles.

"Besides those outrageous robbers, there are others called spongers, who may be considered as intentional beggars, but practical robbers. They come as solitary individuals, and are always turned away by the sentinels; of course never get into the hive, unless they can creep in at some opening or by-way. If they cannot effect an entrance, they will continue about the hive until some loaded bees come home and alight at some distance from their comrades; then the sponge seizes, bites, and tears, until they vomit up their contents; which the sponge immediately licks up, and then pushes off. They are of little consequence, only as they are sometimes taken for robbers, they may occasion some unnecessary trouble."—SOUDEK.

The nature of our task does not permit us to follow our authors farther. Nor is it important that we should do so. For the general reader, we have been already perhaps too minute; and the Apiarian may, for farther instruction, consult the books themselves. The tract of *Souder* is a very useful practical treatise, written in a style of winning simplicity, and indicative of an amiable disposition. It is the manual of the bee-masters of this state. Bevan's more elaborate work, incorrect and involved in its diction, and highly irregular, as to its arrangement, is still the best book on the subject; and cannot fail to interest every one, who loves to study the habits and manners of the intelligent, industrious, disciplined and frugal insect, of which it discourses.

ART. V.—*A Grammar of the Language of the Lenni Lenape or Delaware Indians. Translated for the American Philosophical Society, from the German Manuscript of the late Rev. DAVID ZEISBERGER. By PETER STEPHEN DUPONCEAU. Philadelphia, 1827.*

LANGUAGE, as it is of indispensable importance, in the intercourse between man and man, and as occasions for its use, are incessantly recurring, might readily be supposed in a great measure permanent and unalterable. But if the identity of a language at different times, be thought to depend on exact similarity in the sound of words used to express the same idea, or even in the structure and grammatical forms, it must be acknowledged that in all these, is a tendency to perpetual change. "The signification of words" says Locke, "in all languages, depending very much on the thoughts, ideas, and notions of him that uses them, must unavoidably be of great uncertainty to men of the same lan-

guage and country. This is so evident in the Greek authors, that he that shall peruse their writings, will find in almost every one of them a *distinct language*, though the same words." Essay on H. U. b. iii. ch. 9. § 22.

The doctrine, "that languages contain the history of every people, and are essential guides in the labyrinth of the descent of nations," is not peculiar to this age, nor are we the first who have been amused by splendid and fanciful structures, resting on the basis of etymological deduction; while the learned in Europe, with materials confessedly inadequate, have pressed forward to the work of generalization, and have complacently "unfolded the genealogical roll of the human race, from the earliest times to the present day," others, in various parts of the world, have more patiently laboured in collecting materials to be applied to the construction of a system of general philology. Among those who have shared this toil, the associates of the American Philosophical Society deserve honourable mention; and the work before us, is but one of a series of important papers, which their efforts, roused and guided by the zeal and intelligence of their present distinguished President, have brought to light. But in this country, few attempts have been made at extensive classification and systematic arrangement, and with one or two exceptions, our philologists have forborne any important decisions respecting the origin, migrations, and filiations, even of the people of our own country, based on the deductions of their favourite study.

The infancy of every science, is the era of golden visions, and extravagant expectations; and if future times should teach the philologists, that they were once ready to promise more than they will ever be able to perform, their case will not be entirely peculiar. But if the light which this study is to throw upon those remote traits of human history, already beyond the glimmerings of tradition, and lost in the mist of antiquity, may never attain that meridian strength and splendour it is now thought to promise—yet, as in the case of chemistry, though the golden secret may be missed, we know not what important and unexpected discoveries may be in the way of those in pursuit of an unattainable end. The project of clearing up the doubts, which rest upon the early history of nations, may prove to philology, what the idea of perpetual motion has been to mechanics, the philosopher's stone to chemistry, and the universal remedy to medicine.

Languages, we are told by philologists, may be divided into *groups, kingdoms, families*; and these again into *tongues, dialects, sub-dialects*, and *patois*. *Language* is therefore, we conclude, the more general denomination. That all these divisions, have ample foundation in nature, is highly probable, but that

they can all be defined by reference to permanent and universal characters, may admit of doubt. We believe all mankind descended from a single pair; we consider the whole race as but one species; whence, then, if the practice of the natural historians is to be followed, can be derived peculiarities characteristic of eight hundred and sixty human languages? In all dialects, or as they are commonly called, languages, there may be characters less mutable and uncertain, than the sound of words or syllables, and from such, should divisions be determined; but the time is far distant, when these peculiarities, in the varieties of human language, can be well understood, or even such a number of them ascertained, as might serve for the foundation of a satisfactory system of arrangement.

But though we may hesitate to adopt all the details of the systems of philologists, we are prepared to estimate the value of many of the general results and inferences, to which their pursuits may lead them, and to appreciate the aids they may afford to the study of history, and of the philosophy of the human mind. The Ethnographical Atlas of M. Adrien Balbi, to which Mr. Duponceau, in the preface to the work before us, gives a passing notice, is known in this country only through abstracts and critical notices, but it is believed to be a work of great learning. The plan, though not entirely new, is magnificent—but the execution, attended with such extreme difficulty, as must have exposed the author to some inaccuracies. The sanction which the late distinguished geographer, Malte Brun, is said to have given it by his commendation, will lose some of its importance, in the estimation of those, who, with the means of correct information in their power, will give an attentive examination to the table of etymological resemblances, by which he endeavours to support his hypothesis of numerous emigrations, to make up the stock of the aboriginal population of America. It will there be seen, not only how faint and forced are many of those resemblances, but how wholly erroneous many of the statements by which that eminent geographer was induced to suppose, that several distinct streams of population, could be traced from various parts of Asia, Africa, and Europe, to America: and all, anterior to the discovery by Columbus. It is late, one would think, to call to mind the opinions of that profound philosopher and linguist, Sir William Jones; yet the growing fondness for etymological deductions, seems to imply, either that subsequent researches had overthrown his doctrine, or that the results of his experience had been forgotten:—that etymology does not now, as in his day, “afford evidence, which is commonly fallacious, and which, *where it elucidates one fact, obscures a thousand.*”

The design of the ethnographical atlas of M. Balbi, appears to include not only the tracing of the geographical boundaries of

existing languages, but the delineation at one view of their early history and remote connexions, the ramification of parent stocks, and the net division of branches, now so numerous and of such dissimilar aspects. Careful inquirers will, we are confident, admit his conclusions with caution; and even his classifications and divisions, particularly of unwritten languages, will meet with most ready adoption, from those who have least extensively and patiently examined the dialects of rude nations, as they exist among such people, rather than in the records of travellers. Simplicity is not commonly a predominant feature of sciences in their early state, and is in general entirely wanting in attempts to classify and arrange ill ascertained facts. It is not improbable, that more extensive and careful examinations, instead of enabling M. Balbi and the philologists of Europe, to add to the *eight hundred and sixty* languages and five thousand dialects already ascertained and described, "almost as many more," which are confidently supposed to exist, will show that even these numbers ought to be greatly reduced.

Closely connected with this topic of oral language, its history, and the consideration of the causes which render it liable to perpetual change, is the subject of written discourse, or the methods of communication by visible signs, used either as representations of ideas or of sounds. Here, likewise, the advance of discovery is introducing simplicity, and demolishing, one by one, the splendid fabrics and fanciful systems, that have grown up during long ages of ignorance, while the imagination revelled without restraint. The Egyptian Hieroglyphic inscriptions and records, long supposed to conceal the wisdom and lore of ages of learning and refinement, under a veil impenetrable to the men of present times, have at last been partly deciphered. These monuments, which were heretofore, to the historian and the philologist, what fossil remains are to the naturalist; memorials of times long forgotten, and of events for ever irretrievable, a theme of wonder, and a standing admonition to human pride, have, by the splendid discoveries of Dr. Young, M. Champollion, and others, been proved to contain allusions to events, comparatively recent, recorded in languages still extant, and in a method, differing only in unessential forms, from the alphabetical writings of our own times. This method forms, probably, one stage in the advance, from that rude picture writing of savage nations, to the artificial and arbitrary alphabetic signs now in use. The first attempt was, doubtless, the sketching events, as they presented themselves to the eye. The first murder, for instance, had any occasion existed for its commemoration, or for conveying intelligence of it to distant persons, otherwise than by oral communication, would be represented by the figure of a man, with perhaps some mark, such as a notable peculiarity in his dress, or person, to identify

the man called *Cain*, standing over the figure of the dead body of another, by similar means denoted to be *Abel*. In process of time, men learn that marks, indicating particulars of time and circumstance, can be introduced, and thus the rude picture becomes by degrees more complex; at length *phonetic* signs are produced by the natural device of making the figure of an animal, or other object, represent the first sound in the name by which it happens to be generally known. These characters once agreed upon, their value established and well known, it is in the next place desirable to reduce the labour required for their production; hence, the lion or other figure, is, by degrees, retrenched and cut down, until, in the end, it loses nearly all resemblance to its original prototype, but still retains traditionally its relation to a particular sound, for which it at last comes to be considered the arbitrary and invariable mark.

From the more full and complete investigation of the *picture writing* of the Mexicans and Peruvians, Mr. Duponceau anticipates interesting discoveries; and such, no doubt, may be the consequence of well-directed and patient research among their records. From accounts already before the public, we know that the Mexicans, at the time of the invasion by the Spaniards, resorted to a method of writing, very similar to that at present in daily use, among the rude tribes of North America. The arrival of the Spaniards among them, was designated by the delineation of a large vessel, and of a man with a head dress, or some peculiarity of costume, by which the foreigners were immediately distinguished from the men of their own country. This was simply a representation of the event, leaving the whole train of circumstances, the surprise occasioned, the apprehension excited, and all that might be hoped or feared from it, to the imagination of those to whom the record should be conveyed. That this method must be too defective to be used, where oral communication through persons but moderately intelligent and trust-worthy, can be substituted, must be manifest. Instances might occur, in the life of uncivilized people, where important purposes could be attained, by its assistance; and it might become an essential aid, in the preservation of a knowledge of events, or even of moral instructions, by tradition. Since, we are confident, this method, more or less improved, is common to the Mexicans, the Peruvians, and the North American Indians, it may not be amiss, a little to consider, to what extent it has been carried by the latter; as, possibly, useful hints may be thence derived, for the investigation of the records left by the former.

The picture writing of the North American Indians, is, to some extent, a business of education; and men become proficient in it, in proportion to their skill and industry. In its most

simple form, it differs little from the delineation, according to their means and skill, of the visible part of events : examples will afford the best illustration. An Indian is accidentally separated from his band, perhaps, when they are on their route towards some distant hunting grounds. Following them, at an interval of several days, he finds, at one of the customary places of encampment, (and so disposed, as not to escape his notice,) a little sheet of birch bark, a smooth stone, or a slender piece of wood, prepared for that purpose ; on which, he distinguishes the following rudely sketched figures—a bear lying, and with his head down—a knife, the point touching the bear, the handle in contact with some part of the figure of a rattle snake—this figure again, in some part, touching the dug of a female beaver. The position in which this record is left, will, in a moment, assure him that it has been intended to attract observation ; and the unfrequency with which any travellers, not of his own band, can be supposed to pass that route, will lead him to suspect that its contents concern himself. On examination, his own *totem*, the designating mark of the family of his father, will meet his eye ; and he will, in as little time as a white man would require to read a note containing the same amount of information, become fully possessed of the import of the communication. In the figure of the bear, he will recognise the *totem* of one of the families of his band ; in the attitude of this figure, the drooping of the head, and the position of the knife of the man, called the *rattlesnake*, the son of the *female beaver*, he will read that his brother, the son of his own mother, has killed another man ; whom by his *totem*, and some mark added to distinguish him from the other males of the same family, he will immediately single out from all the men of the band. In a community extremely limited in number, and simple in their habits, this method will be adequate to several important purposes. In the instance just given, no words would be required, to convince the hunter that he should immediately provide for his own safety ; and the intimation he has received, he cannot easily misunderstand. The fact that a man of the rattlesnake *totem*, has murdered another, might be too general ; as several of that *totem* might be found in the band, and, by some circumstance, so disconnected, and perhaps hostile to each other, that one would not be pursued for the other's crime ; hence it was necessary to introduce the figure of the female beaver ; and to show, by bringing the figure of the rattlesnake in contact with her dug, that the murderer was the son of a woman bearing that *totem*, or distinguishing mark. This, the person addressed, could not mistake for any other than his maternal brother ; for whose violent act, he himself is, by the customs of his tribe, held justly accountable.

But, in writings of this kind, if these rude delineations may

be so called, the meaning attached to each figure, must be, in a great measure, conventional and arbitrary. A man, for instance, of the moose *totem*, wishes to convey to his friends, information that he is perishing of hunger. He is, perhaps, bewildered in his journey, or hopes that some persons may by accident fall upon his *trail*, and overtake him. He delineates a rude sketch of a moose, and, about the mouth of the figure, he daubs some white clay, or perhaps ashes, or whatever pale looking substance he finds next at hand. This sign, though it has originated in a close observation of nature, which has led these people to remark, that persons in a starving condition, look pale about the mouth, yet would not convey to one uninstructed in this language of signs, any definite information ; and, consequently, it would fail of being applicable to any useful purpose.

They have also among them, long poetical compositions, retained in the memory of the author, and communicated to others, by the assistance of figures, which they delineate on parchment, or birch bark ; but to learn to read, and comprehend a performance of this kind, not surpassing the length of two hundred lines of English poetry, perhaps a year would be required, of patient attention and close application, in such intervals of leisure, as an Indian hunter may find between his excursions. When once fixed in the memory, the exact meaning, and the words connected in the mind, with each figure, are liable to be forgotten ; and are recalled, as may be observed, in those songs used in their religious ceremonies, rather by association with the sound of the tune to which they are sung, than by any necessary significance in the figure itself. Whether the Mexican and Peruvian picture writing, at the time of the discovery and conquest of those countries, was in this rude state, or had made a farther advance towards the construction of an alphabet, by the intermixture among these pictures, of some phonetic signs, remains still to be determined. That they had a knowledge of this method, and did not disdain, on occasion, to make use of it, we have seen ; that, without any other, their means of communication, by writing, were extremely limited ; and that their records, in case of the irretrievable loss of the traditional glossary, which originally accompanied them, must for ever remain in a great measure unexplained, is, we think, evident.

Among the intelligent and careful men of the Chippeways, disputes sometimes happen, concerning the figures proper to be used, in representing in their religious songs, their female divinity, *Mesukkummik Oqui*, or the "Mid-earth Female;" some contending it should be that of an old woman, laying down in the middle of the field of parallel lines, representing the earth ; others, that of a snake running across the same field ; but we doubt whether any key to a rational interpretation of such figures

could be found, after all the lore of the native commentators had perished from the earth. A Father Kircher might find among them, hints for many a fanciful and towering hypothesis; but their original signification would be lost for ever.

Some discussion respecting the comparative powers and properties of the American and other languages, seems to have been entered upon with some warmth, in the preface to the work before us; and the translator has, perhaps, with more care and explicitness than the case required, replied to some remarks on this subject, in the *North American Review*, for January 1826. The Baron Wilhelm von Humboldt, has also incurred some displeasure, by calling the process of combination, used in the Indian languages, *agglutination*. This method of compounding, common to all the languages of the American race, is now well understood; and no doubt differs, in some respect, from that employed in the Sanscrit. But, whether it is to be called *synthesis*, or *agglutination*, we are not aware that the philologists, either those who charge it upon the American languages, as a blemish and a defect, or those, on the other hand, who consider it a principal and peculiar beauty, have been careful to point out in what respect it differs from, or agrees with, the similarly denominated character in that much admired eastern language. A native Indian writer, in the first volume of the *Asiatic Researches*, has, among other instances of compound Sanscrit words, this: *Rig-yajuhsámát'harva*, which, he says, is made up of *Rich*, *Yajush*, *Sáman*, and *At'harvan*. Wherein does this compounding consist, but in blending together several distinct words, and rejecting from the compound, several syllables, which seem not indispensably necessary to excite the successive ideas the word is intended to represent? And how does this differ, whether it be agglutination or synthesis, from the practice of the Delawares, the Chippeways, or the Menomonies; except, perhaps, that the latter have carried the principle a little farther, by throwing out more syllables? In the American languages, instances are perpetually recurring. We may give one or two in illustration; and, first, the word *Kuligatschis*, from page 82 of the translator's preface. The component words, are: *Ki*, thy, (Zeisberger's Delaware Indian Spelling Book, p. 8,) *wulit*, handsome; *wichgat*, leg; and *schis*, a diminutive termination. *Kiwulitwichgatschis*, pronounced in their ordinary manner of speaking, *kuligatschis*. The following instances, from the dialects of the Menomonies and Chippeways, show their manner of contracting and blending, in sentences somewhat more complex. *Netenainemutchkewuskepe*, [Menomonie,] *neen*, I, *tenainetimmenow*, think; but this is always used with the inseparable pronoun, and would be more properly written, *n'tenainetimmenow*; *menawutch*, a little; *okewuskeperow*, he is drunk. The sentence means, "I think him some-

what drunk;" and is pronounced like two words. *Anosomiegawboud*, [Chippeway,] in which we distinguish *anosomie*, before, used always in composition, and *neboud*, the person standing. *Anosamahbid*, from the same *anosomie*, and *namattahbid*, the person sitting. "Before him standing;" "before him sitting;" one peculiarity in these languages being the constant, and as it were, unavoidable noticing of the situation of the person or thing spoken of. "The gun belongs to him sitting;" "the canoe floats before him standing;" or "lies on the ground before him sitting." They say not, "the canoe is in the water," or "on the land," perhaps for want of the verb substantive; but there appears also, in all their conversation, an accurate and careful designating of place and circumstance, dependent in some measure upon the genius of their language. An example from the version of the Bible, by Mr. Eliot, (a store-house of invaluable materials to any one, who would inquire into the character of the American languages,) in the rendering of our vague preposition *before*, will a little illustrate this point; and show also, that the Indian languages, whatever may be their defects, are not entirely destitute of logic. *Anaquabit*, this form is followed by the name God, which Eliot did not attempt to translate; the expression in the English version is, "before God." *Anaquabenit wetamoh*, "before his brethren." *Anaquoshik nepawz*, "before the sun." *Anaquotag Pihahiroth*, "before Pihahiroth," Exodus, xiv. 2. *ut anaquabhettit*, "before their eyes," Ezek. xxxvi. 28. All these, and perhaps many more, are applicable to the translating one word *before*, in allusion to situation; *before*, in time, is rendered by *asquam*, still a different word.

But to return to the consideration of that peculiarity which Mr. Duponceau considers "the most curious thing, that exists in the language of the Indians," namely, "the manner in which they compound their words," we would gladly be more particularly informed, wherein it differs in principle from the compounding which we meet in the Greek, to some extent in the Latin, and perhaps in all other languages. We find in the American, as in the Sanscrit, the English, the German, and even we believe in the Hebrew, and its cognate dialects, though with less frequency than in any other family, words compounded from several simple ones, parts of which are omitted. But whether or not it be entirely peculiar to the American languages, it is not, we conceive, when used as it is by our Indians, a defect chargeable upon the genius of the language, since in most instances at least, any who are too critical to be pleased with it, are at liberty to take in preference the more circuitous way, and may separate the component words, each of which have furnished something to the compound, and pronounce each at full length; for instance, the Chippeway hunter, in his *medicine song*, or prayer to *Nanabou-*

jou, the hunter's god, may, if he chooses, substitute for the neat and sonorous word *nemukquiosa*, its constituents, as pronounced in common discourse—*neen, mukquaw papahmosa*, "I walk a bear;" but would he gain any thing by the exchange? In place of one word, which we may call beautiful, since it is pleasant to the ear, and expresses with certainty the meaning, "I walk in the disguise of a bear, and that disguise so craftily worn, that I am really a bear, or mistaken for such by all who see me"—he is compelled to use three words, expressing not a whit more, nor with any greater precision; he has to form about twice the number of articulate sounds, without getting an inch farther forward in his discourse. To us, many expressions of this kind, with which the Indian languages abound, appear faultless, following the natural order of the ideas in the speaker's mind, and presenting each to the hearer as clearly, as definitely, and in some instances as briefly, as is in the power of language.

The American languages, despised as they have been, and poor as they truly are in respect of a multitude of words, common enough in the languages of more polished and artificial societies, yet present to the candid observer many features deserving admiration. We will not say there are in these languages many *refinements*; perfections there certainly are, which our own, in the parallel expressions, cannot equal. A single instance of comparison may be taken from the more familiar naming of one of our simple ideas. It is common, among us, to hear a person say, "I am cold," "the cold is very severe," "he perished of cold," and "cold has done this or that." There is certainly an ambiguity in some of these expressions, to which nothing but long use can have reconciled us. Could a Chippeway, familiar with all the doctrines of the philosophers, and chemists, on the subject of cold, and knowing our language as well as any among us can be supposed to know his, hear our commonest phrases into which this word *cold* enters, would he not cry out *barbarians*, and pity a people compelled to use so rude and unintelligible a language? In his own dialect, the most general and indefinite word, corresponding to our substantive "cold," is *kissenah*; but if one of them, perfectly understanding our language, would translate our common expression, *it is cold*, he would say *kissenahmuggut*, which is saying explicitly, "the weather is cold." But were he to say, "I am cold," or "I experience the sensation occasioned by cold," he would use quite another word, *nekakutch*, or in another dialect, *nepeengaje*, or in another, *nebaketchimmenow*. To water unfrozen, he would apply a word differing from that used in speaking of the severe cold of winter: entering another's lodge, and asking for cold water, he would say, *takekummew attai nuh*? "Is there cold water?" Here *ta-ke* is used for cold, which closely resembles the Delaware

adjective *tekek*, p. 42, Zeis. Gram. (p. 104, Phil. Trans.) there translated "cold," without limitation ; but in the northern dialects it is commonly used in combination with substantives, which are the names of liquids. Were one to say to an Indian, as white men little understanding their language often say, *neen gitsche kissenah*, meaning, "I am very cold," he might, in so doing, follow the method of highly polished languages, but whether that method would be in reality less exceptionable than that chosen by the savage, is doubtful. There is to be observed also in their adjectives a kind of preciseness, which ours often want. In the quality *sharpness*, they designate by one adjective that kind which belongs to a point, by another that of an edge. *Kippuggah*, in the Ottawwaw dialect, is an adjective, used in speaking of that kind of *thickness* which is found in a plank. *Pussugwawqumme* is *thick*, in connexion with the names of fluids, as molasses. *Kippuggequt*, *thick* cloth. *Kippuggabigqut*, *thick* iron, &c.* Our limits will not permit us to multiply examples of this kind, nor to notice the curious inflections, and numerous forms of the verbs, the almost endless modifications of the prepositions and other characters, which would seem to entitle these languages to more respect than Baron William Humboldt and the North American Reviewers have seen fit to give them. We have perhaps said enough to betray our leaning towards that class of inquirers, who are disposed to admire the flexibility and compass of the Indian languages, rather than to those who despise their poverty.

True it is, that he who resides long and converses frequently with the Indians, will find most of the words they use confined to the treatment of visible, audible, or tangible subjects ; of whatever is immediately cognizable by their senses, they can discourse, either when present, past, or to come, with as much fluency and definiteness as any men of any nation. Instead of being unable to designate whether the object spoken of be "in the house, without the house, over the house, or under the house," they scarce speak of any thing without indicating, with the utmost precision, its locality : instead of saying, "I go yesterday, I go to-day, I go to-morrow," they mark the tenses of their verbs in a much neater manner than the powers of our language enable us to use. But though their language be amply adequate to all the wants of their situation, though for common narrative, or the delineation of all visible objects and circumstances, it be, to say the least, as good as ours ; it must be acknowledged, that for all the creations of the metaphysicians, for all that

* *Kopachkan*, thick, (a board or plank,) *kopachkisso*, thick, (a skin or hide.) Zeisb. Delaware Gram. p. 167, (p. 229, Phil. Trans.) *Kipaukin*, pazhus okum, thick deer's skin. Menomonie dialect.

class of phantasms sometimes called abstract ideas, they have but few words, and few occasions to use them. This will of course be understood of the Indians in their uninstructed condition. That the labours of pious and patient missionaries have, to the dialects of a few tribes, supplied words for the discussion of what Loskiel calls "spiritual matters," and enabled a few individuals, to some extent, to understand them, we know both from our own observation, and from the testimony of candid and judicious missionaries. Loskiel, in his history of the missions of the United Brethren, assures us that it required the labour of years, so to enlarge the language of the Delawares, that they could be made to comprehend the instruction offered them; and one needs but carefully to observe the language of any of the rude tribes on our frontier, to be convinced, that without long courses of preparatory instruction, the doctrines of our religion, however eloquently delivered and powerfully enforced in their own language, would be to them nearly as incomprehensible, as the same instruction delivered to an ordinary English audience in the dialect of Congo. A little attention to the discourses of their ablest and most successful orators, who must doubtless be at least on an equality with the mass of the people in a knowledge of their language, will best illustrate this point. Difficulties, of whatever kind, are with them *bad roads*; in forest countries, they complain of briars and thorns in their path; in prairie districts, the sand-burrs or the thorns of the prickly pear penetrate their moccasins: if they would speak of prosperity and happiness, they talk of a bright sun, and a cloudless sky, and a smooth path. Some may be ready to suppose that they give preference to this figurative mode of expression, on account of the elevation and dignity they may imagine it to communicate to their discourse; but this will not be found to be the case. Justice, generosity, benevolence, fidelity, charity, gratitude, and fifty others of the virtues of Christian and polished societies, are with them *mennopemahtesewin*, "the quality of well living, or being in health;" and so of all our words which represent abstract ideas.

This statement does not detract from the value of the materials and specimens of Indian languages, left by the Moravians and other missionaries. We believe it would be difficult or impossible for the ablest interpreter to translate into the language of any uninstructed tribe, this short sentence, "Judge not that ye be not judged," at least in such a manner as would, without explanation, be intelligible to the Indians; yet we doubt not that their languages all contain materials, which, in the hands of an Eliot, might in time be made to convey to them an adequate conception of this beautiful and important precept. But before they can fairly be said to comprehend this passage, they must form some idea of the judicial proceedings in the governments

of civilized nations, and must either form a verb which now they have not, or must attach a new meaning to some one they already possess; and this may be done without any departure from those principles and usages to which they have from infancy been accustomed; and thus we believe has it been, that the "Apostle Eliot," the Moravian missionaries, and others, have here and there cultivated their languages until they became capable of conveying moral and religious instruction far more efficiently than they could have done without this cultivation. But the wild plant, though somewhat changed by culture, presents still the same specific characters, and may advantageously be examined by the botanist in the garden, as may the Indian languages, in the works of the missionaries. They are enlarged and enriched, but their distinguishing peculiarities are not changed.

And here, if we may be allowed to express an opinion on a subject so removed from common observation, we will remark, that less of effort appears in the works of Mr. Eliot, to make the Indian language conform to the standard of written and more polished dialects; consequently, that those works, namely, his Grammar and his version of the Bible, present a somewhat fairer view of the language than the works of the Moravian missionaries. It is to be remembered, however, that though kindred dialects, and of course bearing a resemblance to each other, that of the Lenni Lenape may be somewhat farther removed than the Massachusetts from those among the existing dialects with which accident has given us some acquaintance, and that to this circumstance may in some measure be attributed our partiality to the works of Mr. Eliot. The dispute concerning the powers and capabilities of the Indian dialects, gives occasion to remark, that we are apt to underrate the characters and qualities of those of whom we know little, and to despise what we do not understand particularly, if any accident has connected with it the epithets *savage* and *barbarous*. We remember to have met with a man of much native sagacity, who had been taken prisoner from the frontier settlements of Kentucky, at nine years of age, and after leading the life of a hunter thirty years among the Indians, in the remote regions of the northwest, returned to the Ohio. He had entirely forgotten his mother tongue, and for two or three years after his return, he could not but pity a people compelled to use so clumsy and miserable a language as the English appeared to him; but when seven or eight years had elapsed, he was willing to admit, that he thought the whites could speak *almost as sensibly* as the Indians. Somewhat like this would probably be the progress of opinion in the minds of those critics who so compassionate the rudeness of these dialects, should they ever chance to acquire any thing like a competent knowledge of them. We are not among those who

would, as did once one of our monthly periodicals, recommend the establishment of professorships of the Lenni Lenape language, or any of its kindred dialects, in our public seminaries ; but we think it not amiss, that those who will hereafter either condemn or praise them, should know something of their merits. The following extract from the translator's preface to the work before us, evinces correct observation, and philosophic, well-regulated reflection : it may be safely recommended to the consideration of all students of general philology.

"Language is the instrument of thought, and must always be adequate to its object. Therefore, no language has yet been found, and probably none will ever be found, destitute of forms ; for without them none can exist. By forms I do not mean, only inflexions of words and the like ; I mean every regular and methodical arrangement of the elements of speech for practical purposes. This the Chinese have, as well as the Delawares, although in vulgar acceptation it is commonly said, that the Chinese idiom has no forms. Like every thing else in nature, the forms of language are various ; and in that variety consists the chief beauty of the works of the Almighty Creator. A language, it is true, may be more or less adapted to certain objects. Some are more poetical than others, while there are those, which are better suited to the perspicuity of logical reasoning. But it is only after they have been moulded by the hand of genius, that this particular character becomes apparent. Who can say what Homer would have produced, if he had had for his instrument the language of the Lenni Lenape ? This, however, we may with safety assert, that he would have been able to say more in fewer words, than even in his own admirable Greek. Every mode of speech has its peculiar qualities, susceptible of being developed and improved by cultivation, but like flowers and plants, all languages have a regular organization, and none can be called *barbarous*, in the sense which presumption has affixed to that word. An unorganized language would be a chaos, unfit to be used as the medium of intercourse between men. No memory could retain a long list of arbitrary words, if order and method founded on analogy did not come to its aid. Grammatical forms, therefore, are as necessary to human languages, as the organs of life and vegetation are to animals and plants. Neither could exist without them."

To enter upon the examination of the well filled details of this copious grammar, would require either a more extensive knowledge of the language of the now dispersed and vagabond remnant of the Lenni Lenape, or more hardihood, than falls to the share of many men. One single feature in the language of the Massachusetts, called by Mr. Eliot, the change of a verb to an *adnoun*, and which is known to exist, as he describes it, in most of the northern Algonkin dialects, has long been to us a cause of perplexity. We have sought through the one hundred and fifty quarto pages of Zeisberger's Delaware Grammar, for information on this point, and have sought in vain. As the particular we speak of, seems deserving of notice, though it has attracted no other than the following brief description from Mr. Eliot, we shall give his example, and one or two others from kindred dialects, as now spoken. "The simple form of the verb active is when the act is conversant above a noun inanimate only : as *noowadchanumun neek*, 'I keep my house'—and this verb may take the form of an adnoun, *noowadchanumunash nooweatchim-meneash*, 'I keep my corn.'" He had previously stated that

one of the most common plural terminations in that dialect, is in *ash*, p. 10, 4to Grammar. How *noowadchanumunash* can fairly be considered an adjective, and bear the translation he gives it, we see not. That this doubt does not arise from misapprehension of Mr. Eliot's meaning, will be rendered probable by the following instances from kindred dialects. *Pazhkokashew nekesh nahwow*, 'I saw a horse.' *Pazhkokashewuk neeshewuk nekesh nahwouwuk*, 'I saw two horses,' Menomonie. *Nekonoaindung newekewam*, 'I keep my house' *nekonoainemug nemandah-minemug* 'I keep my corn,' Chippeway. Instances are very frequently recurring in their conversation, where the Indians affix the plural termination to a verb, having a nominative case singular, and an accusative plural; for which practice, it seems not easy to discover a reason. Other instances might be pointed out, where, in particulars of minor importance, there would seem to be a difference in grammatical forms, between the Delaware and other dialects of the same family; or the author had given way to negligence. Such is the case of the diminutive terminations, where the sagacity of the translator enabled him to supply one that had been overlooked by the author. From the analogy of other dialects of this family, we should suppose other terminations might have been found, which, like the Chippeway *ish*, if not strictly diminutive, would, nevertheless, require consideration with the diminutives. In the first person plural, also, of active verbs, there is a peculiarity, dependent apparently upon the genius of all these languages, which must therefore have been found in the Delaware, though we see no notice of it in this grammar. It is the difference in the form of the verb, as addressed either to one of the persons spoken of, or to some other, in the first instance, where the speaker says to his companion, *we*, that is, thou and I, go; the second is where the verb, *we* go, is addressed to another person, not one of those of whom the action is predicated. For an obvious reason, in the first of these cases, the inseparable pronoun of the second person, will be used in connexion with the first of these words, and with the second, that of the first person; as, if one speaking to his companion would say, "thyself and I," that is, *we*, go; and in the second, when speaking to another person, "myself and my companion," that is, *we*, go. But minor criticisms of this kind, though they might possibly tend to the more thorough investigation of this subject, would here be misapplied. We shall pass, therefore, from the Indian languages, to a brief consideration of the civil and moral condition of the tribes who speak them.

In the summary remarks we have to offer, concerning this branch of our subject, it is not our design to recur to remote periods of border history, to recall to memory the numerous scenes of blood and violence, with which a review of our relations with

our Indian neighbours in past times could not fail to furnish us, or to make any comparison between the course pursued by our own and other governments in our intercourse with them. For many years past, we believe the Indians have, as a people, and at heart, been equally and without exception, hostile to all their white neighbours. Encroachment and oppression, as they have been exercised at all points, when this devoted race has come in contact with others more powerful, have steadily produced their direct and unavoidable effects. If in times of war between the United States and Great Britain, they have shown a partiality to the latter power, it has been because they knew where those works of blood, in which they instinctively delighted, would find their surest and amplest reward. But we imagine not, that they needed the instigation of reward from a foreign power, to fall, at any moment when they could rouse their spirits to meet the danger, on our exposed frontier. The long account of injuries received from the people of the United States, has never been balanced; and the time is not likely soon to arrive, when the Indian shall not have his own quarrel, or that of his father, to avenge against us. That the policy of the government of the United States, towards them, in all past times, has been humane and generous, we trust will, after the severest scrutiny, be found true; but though as a people, we have ever been disposed to deal justly and kindly by them, it is to be remembered, that they have, from unavoidable necessity, been left almost unprotected from the effects of the rancorous enmity of the frontier settlers. It has never, we believe, been the design of our government to countenance the customary barbarities of Indian warfare, the slaughter of prisoners, the taking of scalps, or the mangling of the dead. But who is there, that, bearing in mind the events of those numerous and bloody struggles, which have happened on our frontier, will deny, that the whites, in contending against them, have too generally retorted their own method with all its horrors? As in war, so in peace; the Indians have known the people of the United States through the medium of that frontier population, into which circumstances had unavoidably infused a contempt for their rights, and a bitter hatred of their persons. Punishment and reward, or intended reward, have flowed to them through the same channels, and it is scarce to be wondered at, if they have in many instances been unable to distinguish the one from the other. The people of the United States, generally, have been, and are willing to make exertions to promote the well-being of the Indian tribes—it is to be regretted that their benevolent efforts should so commonly miss their final aim, or lose their intended effect. This disposition on the part of the government of the United States, has, within a few years past, manifested itself in liberal, if not well-directed efforts for the establishment

of peace between the various hostile tribes, and in the amount of compensation, awarded such of them as it has been found desirable to remove *by treaty* from their lands. It is in vain to regret, what we nevertheless know and acknowledge; namely, that no *equivalent* can be given them for these lands, which, were they not nominally thus purchased, would be taken from them, or rendered unfit for their habitation by the advance of the white settlements. The assertion we have here hazarded, that the system of treaty making, recently pursued to considerable extent by the government of the United States, is likely to result in no benefit to the Indian tribes, may to some, seem to call for explanation, and as in such affairs, particular instances are as likely to excite attention as general assertions, we will select one treaty held at Prairie du Chien, on the Mississippi, in August 1825, of which, the people of the United States have, from high authority, been assured, that "the whole history of the intercourse between the aboriginal inhabitants of this continent, and the European invaders and their descendants, does not furnish a more consolatory spectacle." From the same authority, we abstract a brief view of the design of that treaty, that we may, by reference to the events which have already followed, more adequately estimate its *consolatory* effects. During many generations, it appears a war had raged with inveterate malignity between the Chippeways and Sioux. In this quarrel, the Sacs, Foxes, and Ioways, had taken part with the Chippeways, and we are told "a crisis seemed fast approaching in the north-west, which threatened to anticipate the operation of all other causes to which the sufferings and declension of the Indians are attributable." "Nothing could have averted this result, but the powerful interference of the United States, and it was interposed promptly and efficaciously. That the Indians might *not* vanish as the snow melts before the sunbeam, commissioners were appointed to meet the various tribes, &c." It is to be remarked, that this war between the Sioux and Chippeways, has, as was always the case in this country between tribes of the different stocks, been hereditary for so many generations, that not only "the memory of man runneth not to the contrary," but the very designations by which alone these people speak of each other, mean, as we are informed by some who have knowledge in those matters, "our enemies." Be that as it may, this war has existed since the people have been known to us, and has never been signalized otherwise than by insignificant inroads and cowardly murders. It must therefore have required some sagacity to foresee the approach of that alarming *crisis* which the treaty of Prairie du Chien, and that only, could prevent. Those who have been acquainted with such warfare as the Indians carry on without alliance with more civilized nations, who have seen their largest war-parties scattered by hunger and

the total absence of discipline, even before they could be drawn into the outskirts of an enemy's country, will perhaps be unable to form an idea of the nature of that apprehended catastrophe. But let us admit that the "crisis," whatever it was to be, was averted by the treaty of Prairie du Chien, and "at the expense of the United States," as the accounts of the Indian Department can doubtless certify : we have now seen that the Sioux and Chippeways, have in no respect intermitted their fixed and inveterate enmity to each other. All their petty outrages and mutual murders cannot be supposed to have transpired. The attack and murder committed by the Sioux, upon a lodge of Chippeways, encamped "immediately under the guns of the United States fort," at the mouth of the St. Peter's, in the summer of 1827, and the retaliation on the part of the Chippeways, as described in a letter, dated August 18th 1827, from Mr. Talliaferro, the agent at that station, which has been recently published in many newspapers, will show, that those tribes neither consider their old hostilities at an end, nor greatly respect the power of the mediating party. Could all the outrages practised at their hunting grounds and encampments, since that boasted treaty, be brought to view, they would show that they are mutually as hostile to each other, as they had ever been, and conduct their warfare in the same pusillanimous and assassin-like manner they had ever done.

The treaty at Prairie du Chien, was in the immediate vicinity of the Winnebagoes, a small, but haughty and obstinate tribe, who, since the advance of the frontier settlements, and military posts, have brought the whites into their near vicinity, and maintained a more steadily and decidedly hostile attitude towards them, than perhaps any other band of Indians. Though few in numbers, and conscious of their own weakness, they have ever practised a haughty independence of manner, an insolent deportment, which has generally occasioned strong dislike towards them, as a tribe, among such whites as have resided in their neighbourhood. Being expert hunters, and inhabiting a country where the smaller animals of the chase are still abundant, they have never descended so generally, and so shamelessly, as some have done, to those mean and beggarly arts so predominant in the habits of some tribes. Formerly, whenever a band of them came to the neighbourhood of any of the military posts, or more important trading stations, they brought either some peltries, or so considerable a quantity of fresh game, that they were able to purchase the means of a general indulgence in the pleasures of intoxication ; and, while they remained, rarely failed to be as drunken, as beggarly, and as shameless, as any ; but, when their means were exhausted, commonly, instead of lingering about and enforcing a miserable subsistence, by importunity, by theft,

and disorderly practices, they returned to their hunting grounds, and there remained, until they had accumulated the means of another debauch. In this tribe, we may see, perhaps, the fairest example of the prevailing, but generally disguised and suppressed hatred of the whites, which prevails among all the race. In their drunkenness, it is common to hear them give utterance to their execrations; and discerning men, who have for years been acquainted with the sentiments of many even of the more considerate among them, have often been ready to conclude they had, as a nation, adopted the resolution to *throw their bodies*; in other words, to devote themselves resolutely and unreservedly to destruction, for the sake of whatever vengeance they could, in thus selling their lives, wreak on their oppressors.

The example of this one tribe, may safely be referred to, as an illustration of the manner in which the men of their race have felt, and of the manner in which they have been treated. That they are, as all their forefathers have been, treacherous, blood-thirsty, and ungrateful, we have no doubt; but we are not confident, that their outrages have been unprovoked, nor that the treatment they have met with, from the people of the United States, has been, uniformly, either merciful or just. Recent and near examples are as good as any; and it is to be feared, if we range the whole field of the history of our past transactions with the Indians, we shall find few passages, that can be contemplated with unmixed satisfaction. Let us, then, for a moment, consider the occasion of the late disturbances among the Winnebagoes, and the effect which this quickly repressed and expiring struggle has had on them, as a people. This was one of the tribes called from their hunting grounds, and corn fields, to attend the boasted treaty of 1825, at Prairie du Chien; and it is well known to many on the north-western frontier, that these, among other Indians, received the most solemn assurances, that the boundaries then established or recognised, would, on the part of the United States, at least, be carefully respected. Their great father himself, was pledged by his commissioners, not merely to compel his own people to respect the rights of the red skins; he would make his "arm long" to punish any, among his red children, who should venture to disturb the universal peace and harmony, which was from that moment to prevail. Let it be supposed, then, that the chiefs and warriors of the Winnebagoes, who were present at that council, received these assurances in good faith; that they believed the commissioners had the power and the disposition to make good their promise; "that neither whites, nor Indians, not of their own tribe, would be suffered to settle or hunt on those lands, acknowledged to belong to them, between the Wisconsin and Rock rivers." Suppose, we say, they had not too well understood the character of those with whom they

treated, to look for the fulfilment of these fair promises, what must have been their wonder, almost immediately on returning to their villages, to find the finest portions of their territory overrun with white men, searching for lead mines? Is it surprising, that so prompt and palpable a violation of the terms of the treaty, should have produced some act of retaliation? Need we wonder, that the Winnebagoes, exasperated by repeated insults, and open violations of their rights, as individuals and as a people, and encouraged by the easy escape of the Chippeways, who, a few years before, had murdered four, and scalped two American citizens, at Lake Pepin, and danced their scalps at the doors of our traders, should, within sight of that very treaty ground, and before ten months had passed, have reminded us, by the murder of an entire family, that professions of friendship and protection, did not compensate them for the real evils they were compelled to suffer? The events which followed the murder of the family of *Method*, the butchering at mid-day, and within call of the agent's house, of the family of *Garnier*, the attack upon the keel boats on the Mississippi, the alarms and disturbances at Fever river, the march of General Atkinson, with a large force from Jefferson barracks, of Major Whistler from Green Bay, and the minor events of this, to us, unimportant campaign, are still fresh in the recollection of many. But though, to the United States, this affair has cost only the lives of a few unimportant individuals, and an inconsiderable expenditure, its effect upon the miserable and devoted Winnebagoes, has been much more serious. We speak not of the alarm and distress, the starvation and the despair, introduced into their villages—these are less serious evils, than the loss of the amplest and best part of their territory, between the Wisconsin and Rock rivers; which, as we have understood, the agents of the government in that quarter, have been directed to seize and hold, apparently as a kind of memento to the Indians, that they may henceforth beware of exciting the impatience of a power so abundantly able to crush them. The result is easily foreseen; their valuable lands, and rich lead mines, will invite the enterprise of our restless western population; and the miserable remnant of the Winnebagoes, retaining their ancient habits and feelings, will be compelled to seek, westward of the Mississippi, amid hostile bands, and in a desolate region, a precarious subsistence. This result is not, perhaps, greatly to be regretted. It is a result which must speedily have arrived, whatever probable course events might have taken. A people so rude, so obstinately averse to settled industry, so incapable of patient, connected, and useful thought, must soon have yielded their place to a more enterprising, and, we hesitate not to say, a better race of men. We dare not expect, that the extinction of the Indian stock, can be long delayed; and we

hope we may not often hear of such attempts to prevent it, as that of *Prairie du Chien*.

But it is not alone by impairing the confidence of the Indians in the sincerity and kind intentions of our government, that these treaties, become of late so frequent, exert a most mischievous influence over the Indians. Another evil is the calling them from their homes, always at the most important season of the year, and always to a long and ruinous debauch. The annuities allowed by our government, either in money, or goods, as those annuities are commonly distributed, occasion an evil of the same description. Several of the northern Chippeways, as we have been credibly informed, who were called to attend the treaty at *Fond du Lac*, in 1826, left it, long before the commissioners had completed their speeches, alleging the very satisfactory reason, that, if they should wait for the distribution of the presents, and the conclusion of the council, the season for gathering wild rice would have passed; and, though they might be furnished with provisions enough to enable them to reach home, they would, when they arrived there, be destitute of their accustomed stores of food; and, in the approaching winter, must consequently suffer, if not perish, from hunger. The inhabitants of the country about the upper lakes, and the sources of the *Mississippi*, and to the eastward of the *Red River of Lake Winnipeg*, derive their subsistence from a barren soil, under the influence of an ungenial sky. Those can best estimate their situation, who have visited their dreary country of swamps and snows, and have had an opportunity to see that even the dried blue-berries which they preserve, constitute an important item in their winter's supply of food. In such a country, and to such a people, it will not be thought a matter of little moment, to be called away, at the time of the wild rice harvest, to them the most important season of the year. We have the information, from good authority, that many persons in the country of the Chippeways, have, in the two winters succeeding the treaties of *Prairie du Chien*, and *Fond du Lac*, perished of hunger, in consequence of the unavoidable neglect of their customary avocations, occasioned by their absence, to attend those treaties.

Those who know the domestic manners and habits of the Indians, will not object to this statement, that a few only of the principal men are required to attend the treaties, while the women, the young men, and the children, may remain at home. The life of the Indian, in his remotest and wildest haunts, is one of constant apprehension and frequent alarms. The chief cannot leave his band, the warrior will not desert his family, when he knows the enemy is near to take advantage of his absence. Many circumstances combine with their prevailing and constant dread of their enemies, to prevent the temporary separation of the im-

portant men from their respective bands. Hence it follows, that whether a distant treaty is to be attended, or annuities to be received, the hunters and their families desert their country, and migrate in a body. The presents to be distributed form the only attraction, the expected debauch is the only motive, of the journey. The larger the amount of goods or money to be delivered, the greater the evil to them, as they are sure to return brutalized, stupefied, sick, and miserable, in proportion as the means have been furnished them for the purchase of liquor. The scenes annually presented at Detroit, at Malden, at Drummond's Island, and at all places where annuities are distributed, and the precincts of all treaty grounds, furnish ample and far from *consolatory* exemplifications of these remarks. If it happens not to be the wish of the agent or superintendent to retain the property thus bestowed by the government upon the Indians, in his own neighbourhood, and the presents are sent beyond the frontier, or even to their villages, troops of greedy retailers of whiskey, like wolves and buzzards, are prompt to assemble wherever their prey is offered. There is a set of people on all the frontier, who may, at any time, be heard to boast of the copper kettles, the fine blankets, the stroudery, and other valuable articles, they have purchased from the Indians, for inconsiderable quantities of whiskey. It would be easy to swell the catalogue with other abuses and enormities, such as that which took place within a few years, in the distribution of an annuity, not far from Detroit, where, it being ascertained that the sum to be paid to the tribe amounted to one dollar and twenty-five cents to each individual, the clerks and subordinate agents agreed, that the Indians should receive one dollar per head, and that the remainder should be retained as a kind of fee money—but we would confine our attention to those practices which prove most directly and most extensively ruinous to the Indians.

In these negotiations, where the commissioners have a definite object in view, such as the purchase of lands, it often happens, that the men who are in reality the chiefs of the tribes to be treated with, have too much firmness, too much foresight and independence of character, to accede with cheerfulness and promptitude, to whatever propositions may be offered them. Instances are not unknown, where, in cases of this kind, the commissioners have bestowed medals and other things which they have been pleased to consider the insignia of distinction, upon such men as they could expect entirely to overawe, or to influence by presents and persuasion. These nominal chiefs, *formed to meet the case*, set up to enact a part, are, when the occasion no longer calls for their use, delivered over to the contempt of their own people. It was a *chief* of this kind, who was met and recognised by the commissioners, at the treaty of

Fond du Lac, in 1826 ; who had, by this kind of unsolicited distinction, been so exposed to sarcasm and ridicule, as to have become an outcast from his tribe, and in every respect one of the most miserable of men.*

* The interference of agents and commissioners, in attempting to confer dignity and authority on such men as have neither personal nor family influence among their own people, can be productive of no good. If such spurious chiefs are, in a great measure, disregarded, still their brief elevation becomes an evil to themselves, by drawing upon them the ill will of those who are more powerful. Feuds and quarrels occasionally originate in this injudicious interference, where such men happen to be selected, as either by the force of personal character or family connexions, can exert some influence.

It had been proposed, that the treaty of Prairie du Chien should be attended only by deputations of chiefs and principal men from the remoter tribes ; and provision is made, in the 12th article of that treaty, for calling together the Chippeways of the Lakes, the following summer, at Fond du Lac, that the stipulations might be explained to others who should not have been present. Thus careful were the commissioners that none even of the most dispersed and inconsiderable of the Chippeway bands, should, by reason of their own poverty, and the great length and difficulty of the journey, be excluded from a share of the advantages of that treaty. Thus the treaty at Fond du Lac, in 1826, was a second part of that at Prairie du Chien, in 1825 ; and still another appendix being considered necessary, the north-western tribes were again called to meet commissioners at the Bute de Mort, on Fox River, in 1827. The most important, and almost the only avowed object in assembling these two latter councils, appears to have been, to demand, and re-demand, those Chippeways of Lac du Flambeau, who, in the summer of 1824, murdered Findlay and his companions, at the lower end of Lake Pepin, and who were subsequently in confinement, and *were not* tried at Mackinac. The threatenings recorded against the Chippeways as a nation, in case of their refusal to surrender these men, as they are printed at large in the appendix to Col. M'Kenney's Journal of his tour to Fond du Lac, may have been uttered to the Indians ; if so, they must have been considered idle talk, as one at least of the very men, commonly known to have been engaged in that murder, not only appeared publicly at that treaty, but received a medal and other marks of favourable notice. The transactions of the treaty at the Bute de Mort, are not particularly known to us. One thing which that treaty did *not* effect, and the most important of those it promised, was the delivery of the men implicated in the murder at Lake Pepin.

An idea of the inconveniences to which the Indians are exposed in their journeys to, and from, and attendance upon, these treaties, as well as of some other particulars of their influence upon the internal condition of the tribes, may be derived from the following extract, which we have been allowed to make from the diary of a highly respectable officer of the United States army, who accompanied the detachment sent to the treaty of Fond du Lac, in 1826.

" *La Pointe, Lake Superior, July 25th, 1826.*—After twenty-one hours of unremitted exertion, we arrived at this place, so long since made memorable as the field of eleemosynary labours of the Jesuit fathers, under the tutelage of St. Michael. The day had been bright, and long and full of toil. We arrived, 'just as twilight gray had in her sober livery all things clad.' We found a party of Lac du Flambeau Indians on the beach, *who had been for four days without any food.* In making the long portage of the Montreal river, on their way to the lake, they had left their canoes behind them ; being separated from their baggage, and stopping at La Pointe at a season of the year when no fish are to be taken, they had been necessarily subjected to their present sufferings. Their natural improvidence renders them invariably liable to suffering of this kind, whenever they are drawn to a distance from their hunting grounds on these diplomatic expeditions.

" *Fond du Lac, July 29th.*—The determination of the commissioners to wait a

Other instances have occurred, as at the treaty of Chicago, in 1821, (for we love to be particular when *we happen* to have the

day or two for parties of Indians to come in from the sources of the Mississippi, has left us at leisure to follow the impulsion of our several inclinations for occupation and amusement. The natives seem to prefer consuming the time thus thrown upon their hands, in organizing dancing parties, in which they exhibit an unchastened love of show, and a capacity for continued and powerful muscular exertion. They have already given us several specimens of the *begging* and *grand calumet* dances. It is common for some one of the performers to fill up the pauses in these dances by the relation of some anecdote or incident of his life, calculated to call forth the acclamations of the performers. *Their rencontres with the Sioux were the common topics of boastful exultation, to which they recurred with a frequency and boldness that gave little hope of perpetuity to their promises of eternal peace with their ancient enemies.* From this example, the influence is plain, that the savage as well as the civilized man, has his code of opinions, which influence his conduct, and become his incentives to action. Sardanapalus believed the grave the end of pain as well as of fruition, or he never would have said, 'eat, drink, and be merry, for the rest is nothing.' The hope of immortality, cheered the last hours of Socrates, and the Indian fears to go to the 'land where his father has gone,' as a degenerate son, or without some bloody trophy to show that he also has been terrible to his enemies. It is thus the inheritance of deadly hatred descends from generation to generation—thus are they goaded on to the commission of murder, with them a synonyme for war. Until this defect in the moral sense of the man of America shall have been corrected by education, attempts to hold him to the observance of treaty stipulations, so much at variance with his moral creed as those of Prairie du Chien, must inevitably prove abortive.

"*July 30th.*—A party of sixty Indians came in from Sandy Lake. They had been four days on their route, and not having been able to kill any game, had subsisted exclusively on such berries as they could procure in the borders of the river St. Louis. The patience with which they submit to the pains of inanition, was strikingly exemplified in the person of a young married female of this party. On making known the degree of abstinence to which she had been compelled to submit, she was asked whether she felt hungry. With a great deal of pleasantry playing on her handsome features, she said, 'If you can give me something I will eat it,' at the same time offering to her starved infant the maternal fountain, from which his efforts could no longer draw the accustomed nutriment.

"*Aug. 3.*—The great council fire has been kindled, around which these monarchs of the western wilds, in presence of the commissioners, smoked the pipe of peace. After these preliminaries, indispensable on the part of the Indians, were concluded, Governor Cass opened to them the subjects on which they had been called together to deliberate. The venerable patriarch, SHIN-GAUB-E-WOSSIN, as if penetrated with the consciousness of the feeble state of this remnant of a warlike race, arose, 'stretched his aged arm,' and impressively urged upon his people the necessity of lending a listening ear to the voice of their *Father*. He seemed particularly desirous that the proposition for ceding to the half breeds the right to portions of the soil, should be promptly acted upon. Among the speakers of the day, of whom there were several, not one spoke otherwise than favourably of this measure. The people of Lac du Flambeau, presented a map of their country, on which they indicated portions of their territory which they wished should be given to the children of Dingby, who has been for many years their trader. The impression is general among them, that their condition would be benefited by the more settled and instructed industry of the half breeds, could they be induced to settle and remain among them.

"*Aug. 4th.*—Among the groups of listeners, who watch the debates of the council, I observed several females, holding their emblems of widowhood, whose husbands, as I learned by inquiry, had died of disease contracted at the treaty of Prairie du Chien last summer. It would seem as if the inscrutable destiny which hurries to extinction the Indian race, were too tardy in its movements, and

requisite information,) in which management of this kind would not avail to procure the assent of the *chiefs* to the measures required. Other means have, in such cases, been resorted to, and when nothing else would suffice, the besetting and overpowering sin of the Indian has been called in to aid the pure and charitable design of the white man. We have received, in the Review already quoted, No. 55, p. 405, a very consolatory account of that treaty, but accident has also given us a nearer view of that transaction. We are not prepared to exhibit "the items of a formal account current," but fair deduction from circumstantial proofs, and the direct testimony of good and sufficient eye witnesses lead us to believe, that not far from *fourteen* barrels of whiskey, were, by some direct or circuitous channels, issued by the commissioners to the Potowatomies, before they were so far besotted, so completely subdued by the *horrors* of returning sobriety, that they could be made to accede to the terms proposed, or even in any manner to treat concerning the cession of their lands.

Then it was, that the "hoary headed chief," and highly respectable and intelligent man, OTOPUNNEBE,* overcome by the enemy of all his tribe, *though urged to remain sober, and make a good bargain for his people*, arrived at that state of utter abandonment, that he assured his Father the Potowatomies cared for neither money, nor lands, nor goods, nor any thing, save whiskey. Their lands have been taken, and whiskey has been given them—as if this drunken petition had been the only rule by which those appointed to watch over their rights, had considered it their duty to be governed.

Not the least among the faults in the existing laws, regulating intercourse with our Indian neighbours, is, that no effectual check is interposed to the introduction of whiskey into every nook and corner of their country. It is not alone in immediate contact with our settlements, but to the remotest of our trading posts, that the Indians, old and young, male and female, the chief and the war-

needed to be accelerated by calling them at the most dangerous season of the year, from their high and healthful abodes, into the poisonous marshes of the Mississippi.

"*Aug. 5th.*—The Vermilion lake representatives left the council ground this morning, lest the consequences of farther delay should be starvation in the coming winter, the season of their rice harvest being at hand.

"*Aug. 7th.*—It became necessary to recapitulate the terms of the treaty this morning to a band of Chippeways from the upper falls of the Mississippi, who had arrived after the chiefs assembled in council yesterday had made their *totems* in token of perpetual peace. This opportunity was seized upon to confer badges of distinction on a few more of these erratic sons of the forest. How vain are these emblems of rank, in a society whose government is patriarchal; where the people know no power but physical force, and acknowledge no superiority but that of talents and direct personal influence!"

* Written in some papers relative to that treaty *Topmibe*.

rior, all give themselves up to the most brutal intoxication, whenever the noxious *fire broth* can by any means be procured. At every trading station, the supply of intoxicating liquors is limited and regulated solely by the quantity and value of peltries the Indians can produce. Direct purchases are, we know, rarely made with whiskey; that is, the Indian rarely exchanges his peltries for that article nominally: but he expects, and custom has rendered him confident, that he is to be *treated*, or to receive a bonus in whiskey in proportion to the value of his peltries, and the profits he allows the trader. Many, we have no doubt, of our traders, would gladly free themselves from compliance with this burdensome custom, seeing it is one which exerts a deleterious indirect influence on their business; but so universal has this appetite for intoxicating drinks become among the Indians, and so entire its influence over them, that the trader who should refuse it to them, would soon be compelled to yield to his competitors. We speak the result of some observation, both at our military posts and Indian agencies, and "out of sight of the flag staffs" of either, when we say, that wherever the white man comes in contact with the Indian, there the latter is sure to obtain the means of ruinous, and long-continued, and frequent indulgence in drunkenness. Much good advice has been offered them on this subject, and instances have occurred where gallons, and perhaps barrels of whiskey, have been spilled on the ground, at treaties, on purpose to show them how they ought to despise this pernicious drug;—but the temptation of a fat buck, or a portion of goodly territory, has, if we mistake not, sometimes enticed their careful and politic political *Fathers*, to forget their own instructions and advice.

It sometimes happens, as at the treaty of Prairie du Chien, that the Indians, in the heat of summer and the commencement of autumn, are called from their own elevated and healthful regions; and, after long and toilsome journeys, are exposed for many days to a noxious and pestilential atmosphere, which cause, aided by irregularities and change of aliment, fails not to occasion fevers, and mortal distempers. These the Indians often attribute—as our positive knowledge enables us to say, did many of those who sickened and died, at or soon after the treaty of Prairie du Chien—to poison administered in the food issued to them.

Among the minor evils of these meetings, may be enumerated the exciting and keeping alive quarrels between individuals and bands, who perhaps would rarely or never meet, but for these occasions. The commissioners, and others who have attended these treaties, can doubtless recall instances of murders committed and defiances given at these places, where the Indians have assembled, as they are told, "to brighten the chain of peace."

Thus have we enumerated a few of the instances in which se-

rious evils, and severe sufferings, result to the Indians from these idle and mischievous convocations. To all the admirers of these treaties, we would recommend the perusal of a chapter on the subject, in the last edition of that unostentatious, but in many instances well informed treatise, entitled, "*Modern Chivalry*."

But we have no disposition to magnify this business of Indian treaty-making into an affair of very serious importance. That these meetings ever have, or ever will result in any important benefits to the Indians themselves, will not be expected by those at least who have ever reflected on the subject; and to all the people of the United States, it is, or should be well known, that the causes which are hurrying to ruin the Indian tribes, are less easily counteracted or removed, than any limited abuse of public confidence or misapplication of public means, on the part of any of the subordinate officers of government.

The sufferings of these people, and their apparent rapid decline, have excited of late years the commiseration of the humane, and called forth the exertions of the benevolent. The voice of the people of the United States, could it be heard, would speak peace to these long harassed tribes. Public sentiment has been, and is strongly in favour of efforts for the amelioration of their condition, by conveying to them the lights of civilization, and the consolations of a pure religion. The attention of the national legislature has been repeatedly called to the subject. Laws have been enacted, multiplied, modified, amended—any thing but enforced. A department of the general government has been organized for the purpose of superintending the concerns, watching over the interests, and promoting the welfare of these people. It is not, however, supposed by any, that these desirable objects are fully attained. The offices of the Indian Department are considered, under the existing laws, means of providing for importunate applicants, or of extending executive patronage. To the majority of the people it is well known, that the existing system of Indian agencies is exerting no salutary or elevating influence upon either white men or Indians; and many would rather be convinced, that the liberal expenditures already made on account of the Indian Department, have been generally and extensively beneficial, than to see those expenditures increased to the extent recommended.

In this case, which appears to us nearly identified with that of humane and Christian feeling, something may yet be done by legislation;—something by the exertions of those, who, if there be any such, having a knowledge of the existing defects and abuses in our laws or their execution, will, without prejudice or partiality, hold them forth to the view of the public.

But if any effort on our part could check or arrest the downward career of this race, if any extensive or valuable benefits

could be extended to them, we might hope they would accrue from the benevolent exertions of that class of men, who go among them to teach the elements of the useful arts, and the principles of the Christian religion. At several points along our extended frontier, may these disciples of a benevolent religion be met with, labouring from day to day, and from year to year, in the slow and difficult attempt to give the Indians such a knowledge of letters, and such an enlargement of ideas, as may enable them to receive and comprehend the important doctrines of Revealed Religion. Without any sanguine expectation of extensive general improvement in the condition of the Indians, to be derived from the adoption among them of the Christian religion, we are confident, that much good must spring from pure example, and industrious habits, as well as from the cultivation of the mind, imparted to the children about our mission stations. Here it is, that the most earnest efforts are made to apply the remedy to the seat itself of the disease, to form the habits, to discipline and elevate the minds of these children of the forest, to inure them to the practice of patient application—of connected and persevering exercises of thought, and thus by degrees eradicate that brand, deeper than the colour of the skin, which seems to have marked the Indian for degradation. From the examples of these schools, the Indians have, perhaps, deduced the conclusion, that numbers of white men can be moved by other motives than the thirst for gain. Our race have thus gained something in the estimation of those they would instruct, but it will be long before they can look upon us with that kind of respect and partiality, which would make them eager to adopt our religion. The example of past times, and of tribes formerly numerous and powerful, but now extinct, forbids us to hope for great or rapid changes for the better. This is *not*, as we believe, peculiarly the age of missionary exertions among the Indians. The work now before us, the Delaware Spelling Book of the same author, the version of the Bible by Mr. Eliot, the Book of Common Prayer in the Mohawk, and many other elaborate translations of religious books into the Indian languages, are memorials more considerable, it is to be feared, than the present generation will leave of similar labours. When will this country again exhibit a spectacle so gratifying, as that of the seven churches of native Indians, under the care of Mr. Eliot?

But though experience exhibits a gloomy picture of the past, and admonishes us to hope humbly for the future, as far as the extension of the Christian religion among the Indians is concerned, it is evident, that exertion should not be spared. Every branch of useful industry, above all husbandry and the ruder and more common arts of life, are what their situation now calls for. Before they can become a religious, a moral, or a happy people, they must renounce

their hunter state, and wandering habits, and to do this, they must become, most of them, agricultural. Portions of our continent are adapted to a nomade population, and such will, in due time, spring up there; but in all the forest country, to the north and east of the Mississippi, planting must take the place of hunting. The people of the large Ottawa settlement of *Wawqunukkezie*, or *L'Arbre Croche*, in the Peninsula of Michigan, are now on the point of abandoning their hunter habits, and betaking themselves exclusively to the cultivation of the soil. Even with the rude and inadequate methods of culture now in use, they are able every spring to spare to the white settlers at Mackinac and other places, considerable quantities of corn and potatoes, from the remains of their winter stock. Now is the time when a little judicious assistance and instruction in the method of rearing and employing in the labours of the field, horses and oxen, in the construction and use of ploughs, and the making and repairing of the ordinary implements of husbandry, would do more for this people, than hundreds of treaties, or thousands of dollars given them in annuities.

It is to be regretted, that exertions for the good of mankind, originating in such disinterested motives as must prompt the missionary labours of all classes and denominations of Christians, should meet obstructions from the prejudices or the invidious feelings of rival sects. Yet we are credibly informed, that this is the case in several of those instances where Protestant missionaries are brought into contact with the Catholics of Louisiana and Canada. In many of these districts are no resident Catholic clergy, and their direct influence where they are found, has not, we think, been inimical to the Protestant missions. But it is to be remembered, that habits of close intimacy have, from the earliest settlement of the country, subsisted between the Indians and the lower portion of the Canadian Catholics. Particular instances are well known, in which large bands of Indians, have, from the frequent representations of the Canadians, who live much amongst them, adopted the belief that the religion of the people of the United States, which is, in general, identified with that of the Protestant Missionaries, is not the true religion of the God of white men, but a poor attempt to copy after the Catholic church, to whom alone the genuine religion had been given. To this impression, confirmed in many instances in its influence, by the more imposing ceremonies, and captivating emblems of that worship, may be attributed some share of the reluctance, on the part of Indian parents, to commit their children to the care of the mission families in the north-west. At some of the largest, best endowed, and most ably conducted mission establishments, scarce one of a hundred of the pupils are of an unmixed Indian blood, or the children of those so unconnected with the whites as to be considered a part of the nation or tribe to which the mother only

commonly bears any relationship. Hence, in the present condition of the mission schools, they benefit most directly, and principally, the children of white traders, and others residing for purposes of business in the Indian country, many of whom are not only abundantly able, but willing to send their children to the best schools of Canada and the United States, were it not for the superior advantages which the mission schools afford.

Another impediment to the extensive utility of the Protestant Missions, may be found in the reluctance on the part of their members, to conform, as the Canadian French have always done, to the habits and manner of life of the people they would instruct. We would not wish to see them becoming as careless of personal comfort and cleanliness, nor above all so compliant in moral habits, as the Canadians have commonly been, but something we think might be gained by descending to meet the Indians on their own ground. In our mission establishments, as at present conducted, a large and costly house is commonly erected, which, placing ourselves in the situation of the Indians, we may call elegant and imposing. It is erected at a distance of many miles, or many days' journey, from the encamping places or villages of the nearest bands of Indians; the people of the mission families are dressed in the fine cloths and fashionable garments of the whites. With such external appearances, in person and dwelling, we may easily believe the Indians have too generally learned to associate ideas of haughtiness and insolence. They approach such dwellings and such people with timidity; and if they escape without encountering insult, or suffering injustice, they are ready to consider themselves fortunate. If they are induced to enter such a building, the extent, the neatness, the good order of the rooms, so unlike what they have been accustomed to see, produce a painful impression, and they go away imagining their children could not be otherwise than unhappy in such a place, and under the practice of habits so dissimilar to those of their own homes. The well-known improvidence of these people, their utter aversion to the labour of tracing the operation of causes to their remote effects, combining with their habitual distrust of the character and motives of white men, render them totally indifferent to the prospective advantages of educating their children in the mode offered them at the mission schools. But were they in some measure aware of the importance of these opportunities, such is commonly the want of discipline in families, and of self-denial on the part of parents, that they would never think of foregoing the pleasure of seeing and watching over their children, for the sake of sending them to distant places of education.

The effect of a system, in some measure the reverse of this, has been tried, and though not found entirely to meet the wishes and hopes of the friends of humanity, has nevertheless, been con-

siderable. From attentive observation of the experiment, we feel convinced that more instruction may, in a given time, be communicated to persons of unmixed Indian blood, by the efforts of a single individual, who is content, day after day, to visit their lodges, converse with them, however imperfectly, in their own language, and teach them the rudiments of human learning, without any restraint, without any attempt to recall them from their accustomed haunts, or take them from their needful employments,—than by the united exertions of a mission family of ten or fifteen persons, conducted in the ordinary method. We would not detract from the merit of those excellent individuals, who are stationed at too remote intervals along our frontier, or even beyond the outskirts of civilization, and who invite the Indians to them, to receive moral and religious instruction. Would that for one institution of this kind on our borders, there were twenty ! The improved condition of society in the immediate vicinity of such a mission house, the human learning, and the religious instruction communicated to the members of families widely scattered through the Indian country, and who, on returning to their own homes, must always diffuse some share of the benefits they have received—abundantly repay the expense of such undertakings. Our only design is to recommend to the consideration of the benevolent and humane, the course which seems to us to have been found most useful. We hope to see the time, when many men of tried character and steadfast piety, shall be scattered among the Indians in their camps and villages, aiding and instructing them, not in literature and religion only, but in the labours of agriculture, the mechanic arts, the construction of houses, the rearing of domestic animals, the care and management of the sick, and in all those numerous particulars, by which the life and habits of the Indian now differ so disadvantageously from those of the white man.

These may, to many, appear considerations of minor importance. Some may suppose, we ought to aim principally at giving the Indians our Divine Religion ; and that all the benefits of civilization, all the comforts and securities afforded by the arts, would follow in its train. But this is reversing the order of things, unless we will have recourse to miraculous interference, which none can now expect. The arts must precede civilization ; and civilization, some degree of it, must precede the adoption of the Christian religion. As well might the husbandman look for a harvest, from seed scattered in the unreclaimed forest, as the Christian teacher expect the fruit of a good life, from instructions which the minds of his hearers are wholly unprepared to admit, and unable to comprehend. Many of the most intelligent and considerable men among the Indians, are now prepared to adopt some of the most important arts, particularly that of working in iron, and the more improved methods of cul-

tivating the soil. Not only the Ottawas and Potowatomies, and others, in the territories bordering the great lakes, but the Sacs and Foxes, the Ioways, and the Sioux, particularly the band of Wawbeshaw, at the Red Cedar, the Ottoes, Kansas, and Osages, are beginning to see the importance of producing more abundant crops of corn, that they may have some surer reliance than on their nearly exhausted hunting grounds. The use of the plough, is the next important step these people have to take, in their advance towards civilization; and however much of labour or of time, may be bestowed in teaching to individuals refinement or learning, adapted to a more mature condition of society, the great mass of the people will keep an even pace with those important arts, on which depends the sustenance of life. Much that is to be done in this way, might easily be accomplished by the Indian agents, had they leisure and inclination to attend to it, and would they propose to themselves, the example of Governor Blount, or some of those excellent men in the South, who have so much benefited the Creeks and Cherokees, by infusing into them some spirit of industry. Even the love of money, becomes an exalting and ennobling passion, when it is made the mean of rescuing men from degradation and barbarism. But, since experience has shown, that services of this kind are not generally to be expected from the officers of the Indian Department, such forming no part of their duties, it seems worthy the consideration of those humane and charitable associations, who are labouring to distribute the word of life to the heathen, whether they may not, by conducting their efforts in a somewhat different manner, be the means of disseminating more durable and wide-spread benefits. If their efforts have heretofore in a great measure failed of success, let them inquire, whether or not they have commenced their work at the foundation; whether they have brought to this important task of civilizing the Indians, the same share of sound discretion, of well instructed and scrutinizing prudence, which has directed them in their own private undertakings. To us, it appears of importance, that the Indians be taught agriculture, and the methods of manufacturing and repairing the necessary implements; and he who aids in giving them these rude arts, confers more important and lasting benefits, than he, who, were it possible, should, without these, qualify them, by all human learning, to enter the field as disputants with Locke and Duns Scotus, Malthus and Ricardo. We reverence the religious opinions of all, who, with us, take the Bible for the revealed will of God; but we are not among those, who think the Christian religion is, with our Indians, to precede and prepare the way for civilization.

ART. VI.—POPULAR SUPERSTITIONS.

- 1.—*The Perennial Calendar and Companion to the Almanac, illustrating the Events of every day in the year, as connected with History, Chronology, Botany, Natural History, Astronomy, Popular Customs and Antiquities, with useful rules of Health; Observations on the Weather; Explanations of the Fasts and Festivals of the Church, and other miscellaneous useful Information, compiled from Scientific Authorities, as well as from the Manuscripts of several distinguished persons, and revised and edited by T. FORSTER, M. B., F. L. S., M. A. S., M. M. R., &c. of Corpus Christi College, Cambridge. London, 1824: 8vo. pp. 803.*
- 2.—*Ancient Mysteries described, especially the English Miracle Plays, founded on Apocryphal New Testament Story, extant among the unpublished Manuscripts in the British Museum; including Notices of Ecclesiastical Shows; the Festivals of Fools and Asses; the English Boy Bishop; the Descent into Hell; the Lord Mayor's Show; the Guildhall Giants; Christmas Carols, &c. By WILLIAM HONE: with engravings on copper and wood. London, 1823: 8vo. pp. 298.*
- 3.—*Supplement to the Etymological Dictionary of the Scottish Language, illustrating the words, in their different significations, by examples from Ancient and Modern Writers: showing their affinity to those of other Languages, and especially the Northern; explaining many terms, which though now obsolete in England, were formerly common to both countries; and elucidating National Rites, Customs, and Institutions, in their analogy to those of other Nations. By JOHN JAMIESON, D. D. Fellow of the Royal Society of Edinburgh, &c. &c. Edinburgh, 1825: 2 vols. 4to. pp. 643 and 712.*
- 4.—*A Glossary of North Country Words in use; from an Original Manuscript, in the Library of John George Lambton, Esq. M. P. with considerable additions. By JOHN TROTTER BROCKETT, F. S. A. London and Newcastle. Newcastle upon Tyne, 1825: 8vo. pp. xxxvi—243.*
- 5.—*Horæ Momenta Cravenæ, or the Craven Dialect, exemplified in two Dialogues between Farmer Giles and his neighbour Bridget; to which is annexed a copious Glossary. By a Native of Craven. London, 1824: 12mo. pp. 125.*
- 6.—*Observations on some of the Dialects of the West of England, particularly Somersetshire, with a Glossary of words*

now in use there: and Poems and other pieces, exemplifying the Dialect. By JAMES JENNINGS, Honorary Secretary of the Metropolitan Literary Institution, London. London, 1825: 12mo. pp. 191.

FROM the long array of lexicographical works, placed at the head of this article, it must not be imagined, that we are about to enter into an elaborate, and *necessarily* dry and tedious analysis of the etymological portion of their contents; valuable as such an analysis would in some respects unquestionably be. Etymological researches, have, indeed, been too much neglected; and this has chiefly happened, from the prevalent but erroneous idea of the uncertainty which must ever attend them. To the authors of the works of this description before us, we are indebted for many important facts, adapted for supplying a chasm, which has existed in the history of many literary and Archaeological points. Let us take for example the *Dictionary of the Scottish Language* of Dr. Jamieson. Without such a key, many ancient British MSS. are totally useless, and many of the old Acts of Parliament, of the works written at an important period of British History, and which record the valiant deeds—delineate the manners, or exhibit the religious zeal of the periods of their production, would excite but little interest in our time, because they would be in a great measure unintelligible.

In such a work, too, many ancient customs, popular superstitions, &c., otherwise unknown or involved in obscurity, are explained and illustrated, under the words which refer to them; and, as the knowledge of ancient manners removes the obscurity of language, reciprocally ancient language often affords the best elucidation of manners. Thus the lexicographer, “that harmless drudge,” as Johnson, himself one of the craft, has designated him “that busies himself in tracing the original, and detailing the signification of words,” is of necessity an historian—and *Etymology* becomes *History*.

If we inquire into the character of the various provincial dialects existing in Great Britain, we must be struck with the important illustrations which the history of our language is capable of receiving from them. These provincial or local words may be considered as constituting three great divisions; the *first*, comprising the words, Saxon, Danish, &c. which may have become obsolete, partly from the introduction, from time to time, of terms considered more fashionable,—partly from disuse, and which are consequently retained, only, or chiefly, in counties remote from the capital, where modern refinements do not easily find their way, or are not readily adopted—instances of these we have in the northern words—*ar* (Dan. *ar*) a mark or scar—*stith* (Sax.)

strong, hard.—*Smiddy*, or *Smithy*, (Sax. *smiththa*) a blacksmith's shop.—*Prin* (Dan. *preen*) a pin, &c. &c.

Hence many archaisms, occurring in our old chronicles, and in Chaucer, Spencer, Shakspeare, Beaumont and Fletcher, Ben Jonson, &c. now totally disused in other parts of the kingdom, are yet preserved in some of the provinces, and especially in those of the north. This can be easily accounted for. In those districts, until of comparatively late years, the inhabitants had little or no intercourse with the more southern counties; the means of locomotion were so limited, that, in the memory of individuals now living, if a person was desirous of visiting the metropolis from these, then considered, distant regions, he esteemed it prudent to settle his worldly affairs before undertaking so eventful a journey. From these causes, the inhabitants of the north of England have retained their ancient language, manners, and customs, unmodified by admixture. Since the condition of travelling, however, has been improved, these provincial distinctions have been gradually fading away, and sooner or later it must happen, that they will be entirely removed. Under such circumstances, the authors of the provincial glossaries before us, are entitled to the thanks of all, but especially of the philologist and the antiquary, for preserving many ancient and emphatic terms, in danger of total extermination. Unimpressed with the evident advantages that must necessarily, however, arise from the gradual amalgamation of all these provincialisms, and feeling that the remains of antiquity ought to be considered sacred objects—the author of the *Horæ momenta Cravenæ*—in other words, of the exemplification of the dialect of the Deanery of Craven, in the West Riding of Yorkshire, laments over the “*corruptions*” which have of late years been suffered to creep into it.

“Pent up,” he observes, “by their native mountains, and principally engaged in agricultural pursuits, the inhabitants of this district had no opportunity of corrupting the purity of their language by the adoption of foreign idioms. But it has become a subject of much regret, that since the introduction of commerce, and, in consequence of that, a greater intercourse, the simplicity of the language has, of late years, been much corrupted. Anxious, therefore, to hand it down to posterity unadulterated, the author has attempted to express, in a familiar dialogue, the chaste and nervous language of its unlettered natives.”—*Introduction*, p. iv.

In a country like our own, where a free migration takes place from state to state, any great diversity of dialects is not to be expected; and accordingly we find, that although those of the eastern and southern portions of the Union may be discriminated, yet that the difference is a wide remove from that which exists between the dialects of the remote portions of England and that of the metropolis. Let us take as an example of variation from the correct English, the specimen of this “*chaste and nervous language*,”—the decadeney of which the author whom we have quoted so ludicrously deplotes, as given in the preface to his

book, and we will venture to assert, that without the aid of a glossary, it would be unintelligible to all, except to a native of the West Riding, or of some part of Yorkshire; the mere inversions of sound, and differences of pronunciation, would of course be comprehended.

“To 'th Conner o' my Book.

“An this life (*little*) book'll gi' the onny plezer efter a hard day's wark, I sall be feaful fain on't. Bud sud onny outcumlins, (Germ. *Ankömmling*, a stranger,) ivver awn (*visit*) this outside staany plat, it may happen gee'em some insect into awyer plain mack o'talk; at they may larn, at awyer discowerze hez a meanin in't as weel as theirs; at they mayn't snert an titter (*laugh*) at huz, gin (*as if*) we wor hauf rocktons, (?) but may undercumstand, an be insensd by this book, life as it is, at ya talk's aqual to another, seeabetide it explains yan's thoutes. Sud t'lads o'Craven yunce git a gliff (*glimpse*) o'what a seet o'words I've coud toghether (*collected*) it'll happen mack'em nut so keen, at iv'ry like, o'luggin into th' country a parcel of outlandish words, er seea shamm'd o'talking their awn. For, o'lat years, young foak are grown seea maachy (*proud, Teut.*) an see feecafully geen to knackin (*speaking affectedly*), at their parents er ill set to know what their barns (Moes. Goth. *barn*, a child,) er javverin about.” p. v.

The above is a specimen of the language of the northern portion of England, in its “*purity*,” for, although the dialects of Northumberland, Cumberland, Westmoreland, and Lancashire, vary, in some respects, from it and from each other, we may place it antithetically with the following extract from Mr. Jennings’s “*Specimens of the West of England Dialects*,” which is scarcely less discrepant from correct English, than the passage we have already cited. It is from a piece entitled “*Mary Ramsey, a Monologue to er Scholards*,” the subject, however, is of little importance; and, if it were, Mr. Jennings has not afforded us much choice.

Now *Miss Whitin*, tha dunces be a gwon, let I hire how pirty you can read. I álways zed that Páson Tuttle’s grandáter ood lorn er book well. Now, *Miss*, what ha ye a got there? *Valentine an Orson*. A pirty story, bit I be afeard there’s naw moril to it. What be ál tha tuthermy (*other*) books you a got by yer good-hussey (*threadcase*) there in tha basket? Gee’s-zee-’em, (*let me see them*) nif you please, *Miss Polly*.—Tha *Zeven Champions*—*Goody Two Shoes*—*Pawems vor Infant Minds*.—Theüzamy here be by vur tha best.—There is a moril to mooäst o’m; an thâ be pirty bezides.—Now, *Miss*, please ta read thic. Tha *Notorious Glutton*—*Pal Came!* turn tha glass! dwont ye zee tha zond (*sand*) is all hirnd (*run*) out;—you’ll stâ in school tha longer vor’t nif you dwon’t mine it.—Now, ál o’ ye be quiet to hire *Miss Whitin* read.—There now, what d’ye zâ to jitch radin as that?—There, d’ ye hire, *Het Came!* she dwon’t drean (*drawl*)—*hum, hum, hum*.—I shoold like ta hire er vussy (*read verses*) wi’ zum o’ ye; bit your bad radin ood spwile her good.”—*Jennings*, p. 186.

The *second* division of provincialisms, consists of words derived directly from some foreign language, as from the Latin, French, German, &c.; but so corrupted by passing through the mouths of the illiterate, as to have their origin scarcely recognizable. The above quotations have afforded examples of this character; and the following are additional. *Brownleemers*—a word used in the North of England, and signifying ripe, brown, nuts,

from the French *bruns*, brown, and *lesmurs*, ripe ones:—the *Jackalegs*, a large claspèd knife, corrupted from *Jacques de Liege*, the Cutler—the word *Riff-raff*, from the Danish *Rips-raps*, the dregs of the people—*Quandary*, from the French *qu'en dirai?* what shall I say of it?—*Bob Ruly*, in the western country, corrupted from *Bois brûlé*, burnt wood, so called by the French because of the quantity of burnt wood in the neighbourhood: or the sign of the *Bull and Mouth*, in Bull and Mouth street, London, corrupted from Boulogne Mouth, or Harbour—and of the *Bull and Gate*, corrupted from Boulogne Gate—or of the Bell Savage, commonly represented by a black man and a bell, but really corrupted from the French, *Belle Sauvage*—the beautiful savage—or that of the *Swan with two Necks*, intended for, and corrupted from the Swan with two Nicks, or Notches, in its bill, as marks by which it might be known; or a thousand others, of the like nature, that might be enumerated.

The *third* and last division consists of mere arbitrary words, not accurately deducible from any primary source or language, but ludicrous nominations from some apparent qualities in the object or thing, being at first scarcely current out of a district, but, by time and use, gradually extending themselves, such as, perhaps, *Bridewain*—applied to a wagon laden with furniture, which was formerly given to the bride, where the father could afford it, when she left his house—*Devil's dung*, for assafoetida, &c. &c.

But the portion of the works before us, to which we are more immediately desirous of drawing attention, is that which treats of popular rites and ceremonies; on which points, each of them affords us some information, especially those of Dr. Forster and of Mr. Hone, which, indeed, as their titles import, are devoted almost exclusively to such inquiries. From the unconnected and consequently unsatisfactory manner in which the former of these is thrown together, the facts are frequently so vaguely detailed, as to be unavailable; whilst the latter comprises only a few subjects, and these perhaps of inferior interest to the general reader: these deficiencies, it will be our endeavour, in the following pages, to supply; and, by pursuing the order adopted by Dr. Forster, in the *Perennial Calendar*, and tracing not only the observances of particular days by the Christian world to their sources, but also the popular superstitions connected with those periods—an investigation calculated to illustrate our ancient poems and romances, and to recall to memory the narrations to which, at different periods of life, each of us must have occasionally listened, either in the nursery, or when of larger growth, we trust that an historical sketch may be formed, which may be deemed not uninteresting. In some instances, it will be remarked, that the superstitions are of such remote antiquity, as to

have actually outlived the knowledge of the causes that gave them origin; whilst others shed light on ancient customs, and point out the analogy between those of different nations; so striking, indeed, it will be found, is the coincidence between the manners of our ancestors, and those of the inhabitants of some other countries, that, if we had no other historical record, it would sufficiently evidence the connexion which must have originally existed between them.

The reader who has not reflected on the subject, will be astonished to find so many of the festivals in the calendar, of ethnic origin; but, on investigation, his astonishment will cease. At the time of the triumph of Christianity, the heathens were of course delighted with the festivals of their gods, and unwilling to part with those delights;* and, as for the attainment of so important an object as the supplanting of Paganism, by the religion of our Lord and Saviour, it became a matter of moment to sacrifice what were esteemed to be minor points, Gregory, (Thaumaturgus, Bishop of Neocæsarea, who died in 265,) to facilitate their conversion, instituted annual festivals to the saints and martyrs. Hence it happened, that, for exploding the festivals of the heathens, the principal festivals of the Christians succeeded in their room, as the celebration of Christmas with joy and feasting, &c. in the room of the *Bacchanalia* and *Saturnalia*: the celebration of May-day with flowers, in the room of the *Floralia*; and that of the festivals to the Virgin Mary, John the Baptist, and divers of the Apostles, in the room of the solemnities at the entrance of the sun into the signs of the Zodiac, in the old Julian Calendar.

In a letter from Pope Gregory the Great, written in the 6th century to the Abbot Mellitus, then going to Britain, the latter is desired to tell Augustine, the first Archbishop of Canterbury, that, after mature deliberation on the affair of the English, he was of opinion that the temples of the idols in that nation ought not to be destroyed, but that the idols should. He further orders the temples to be sprinkled with holy water, and relics to be placed in them; and, because our ancestors sacrificed oxen in their Pagan worship, he directs the object of the sacrifice to be

* *Delectabantur Deorum suorum festis idololatraz, nec oblectationibus iis spoliari se volebant; hanc, ergo, ob causam Gregorius, quo facilius ad Christianam Ecclesiam adducerentur, annuos, in Sanctorum, Martyrumque memoriam, dies festos instituit. Hinc factum ut, explosis idololatrarum festis, in eorum locum præcipua e Christianis festis successerint. Exempli gratiâ, Natalium Christi, cum hederâ et comessationibus, et ludis, jocisque in locum Bacchanalium, Saturnaliumque; celebratio, primi diei mensis Maii cum floribus, loco Floraliû; celebratio denique, festorum in honorem Virginis Mariæ, Joannis Baptistæ, et variorum ex apostolis, in locum solennium rituum, diebus, queis in singula Zodiaci signa, ex veteri Juliano Calendario, intrabat Sol, celebrari solitorum.*—Newton, *Observ. in Daniel. cap. 14.*

exchanged, and permits them to build huts of the boughs of trees, about the temples so transformed into churches, on the day of the dedication to, or nativities of, the martyrs, whose relics they contain, and there to kill the cattle, and celebrate the solemnity with religious feasting.

The strong attachment of a people to their ancient festivals, is, as we have mentioned, a sufficient excuse, in most instances, for the continuance of them, even when, as in the case before us, of an ethnic character : but, at the same time, it must ever be accounted, as a general principle, a dangerous policy which retains the superstition, whilst it merely changes the object or the name.

Before referring to particular superstitions, we may remark, that the belief, that some human beings could attain the power of inflicting ills on their fellow creatures, and of controlling the operations of nature, is one of the highest antiquity. It has appeared in every region of the globe; and from its extensive prevalence, it would seem that the human mind, especially in its state of ignorance and barbarism, is a soil well adapted for its reception and cultivation. Life has so many evils, which the uninformed mind can neither prevent nor avert, and encourages so many hopes, which every age and condition are anxious to realize, that we can hardly be astonished to find a considerable portion of mankind become the willing prey of impostors, who practise on their credulity by threats of evil and promises of good, greater than the usual course of nature would dispense : nor have the lights of Divine revelation, nor the circumstance of their being discountenanced by both civil and ecclesiastical laws, prevented such frauds and absurdities from being encouraged. Their foundation seems to lie deep in the heart's anxiety about futurity—in its impatience for good greater than it enjoys—and in its restless curiosity to penetrate the unknown, and to meddle with the forbidden.* These remarks will introduce us to a superstition practised in the south of Scotland, on the morning of the *New Year*, (January 1.) The instant the clock has struck the midnight hour, one of a family goes to the well as quickly as possible, and carefully skims it: this they call getting “the scum or ream (*cream*) of the well.”

“Twall struck—twa neebour hizzies raise
An’ liltin, gaed a sad gate :
The *flower o’ the well* to our house gaes,
An’ I’ll the boniest lad get.”

This *flower o’ the well* signifies the first pailful of water, and the girl who is so fortunate as to obtain that prize, is supposed to have more than a double chance of gaining the most accomplished

* Sharon Turner’s History of the Anglo-Saxons, iii. 130.

young man in the parish. As they go to the well they chant over the two last of the above lines.

This is an old superstition, and is probably derived from the worship of wells by the Picts. It was known to the Romans: the act of skimming water with the hand, being one of the rites necessary for successful augury. Turnus observed it.

" Et sic affatus ad undam
Processit, summoque hausit de Gurgite lymphas
Multa deos orans, oneravitque æthera votis."

VIRGIL, *Æn.* ix. 23.

" Thus having said, as by the brook he stood,
He scoop'd the water from the crystal flood ;
Then, with his hands, the drops to heaven he throws,
And loads the powers above with offer'd vows."

DRYDEN.

The idea of prognosticating the future condition of the weather, from the state of the atmosphere on certain festival days, prevailed early and generally: but it seems doubtful, whether such prognostications were founded upon any particular regard to the saints with whose festivals they were conjoined. The notion is probably of older date than the Christian era, and was perhaps founded on an observation of the particular phenomena of the heavens, as the rising of particular stars, &c. on which the ancients placed much reliance in their prognostications. In many places, the festival of the circumcision is still considered as affording an evidence of the weather to be expected in the coming year. Many persons, too, make a point of wearing new clothes on New Year's Day, and esteem any omission of this kind extremely unlucky. The salutations of this day are of remote antiquity, as well as the custom of "New Year's Gifts,"* as we shall find hereafter.

The custom of eating *twelfth cake*, and especially of *drawing for king and queen*, on the *Epiphany*, or *twelfth day*, or *twelfth tide*, or *old Christmas day*, (January 6,) as it is variously termed, is antique. In the ancient Calendar of the Romish Church, is an observation on the fifth day of January, the vigil of the Epiphany, "*Kings created or elected by beans*;" and the sixth is called "*The Festival of Kings*," with the additional remark, "that the ceremony of electing kings was continued with feasting for many days." In the cities and academies of Germany, the students and citizens choose one of their number for king, providing a most magnificent banquet on the occasion. In France, during the ancient regime, one of the courtiers was chosen king, and the nobles attended at an entertainment at which he presided; and with the French, *Le Roi de la Fève*, still signifies a twelfth-night king.

The above ceremonies are probably the remains of those for

* Ovid fast. lib. i. 63—74.

choosing, amongst the Greeks, the *συμποσίαρχος βασιλεύς*, &c., and amongst the Romans, the *Rex, modimperator*, &c. *the king*—whose business it was, at feasts, to determine the laws of good fellowship, and to observe whether every one drank his proportion, whence he was also called *οφθαλμος*—the eye. He was commonly appointed by lots, occasionally perhaps by beans, as was usual among the Romans, but generally by the dice. Horace alludes to this *Rex convivii*, or *Rex bibendi*, on different occasions.

"Et domus exilis Plutonia ; quo simul meatis
Nec regna vini sortiere talis,
Nec tenerum Lycidam mirabere." CARM. lib. i. 4.

"When sunk to Pluto's shadowy coasts,
Oppress'd with darkness, and the fabled ghosts,
No more the dice shall there assign
To thee the jovial monarchy of wine ;
No more shall you the fair admire,
The virgin's envy, and the youth's desire." FRANCIS.

And again—

"Quem Venus arbitrum
Dicet bibendi ?" CARM. lib. ii. 7.
"To whom shall beauty's queen assign
To reign the monarch of our wine ?" FRANCIS.

The chief magistrates were not exempted from yielding obedience, if the lots gave another pre-eminence; whence Agesilaus, king of Lacedæmon, being present at an entertainment, was not declared *Rex* till the lots had fallen upon him.

The Monday following the twelfth day is called *Plough Monday*, in Great Britain, from its being about the period at which the ground is begun to be ploughed up.

"Plough Monday next, after that the twelfth tide is past,
Bids out with the plough, the worst husband is last." TUSSEN.

In celebration of this agricultural commencement, in the north of England, the *Fool Plough* goes about—a pageant, consisting of a number of sword dancers, dragging a plough, with music, and one, sometimes two, fantastically clothed; the Fool being covered with skins, and wearing a hairy cap, with the tail of some animal hanging from his back.—*Foster*, p. 13.

St. Agnes's Day, (January 21st,) is fruitful in love superstitions. The following are the most common. On St. Agnes's night, take a row of pins, and pull out every one, one after another, saying a paternoster, and sticking a pin in your sleeve, and you will dream of him or her you shall marry. Old Ben, in one of his *Masques*, refers to this superstition.

"And on sweet Agnes' night
Please you with the promised sight,
Some of husbands, some of lovers,
Which an empty dream discovers."

Another divinatory method employed by love-sick maidens, is to sleep in a county in which they do not usually reside, where they knit the left leg garter round the right leg stocking, leaving the other garter and stocking untouched; they then repeat the following lines, knitting a knot at each comma,

"This knot I knit,
To know the thing I know not yet,
That I may see,
The man that shall my husband be,
How he goes and what he wears,
And what he does all the days."

The next dream, it is believed, will reveal to the lady's gaze her future spouse, bearing a badge of his occupation. A lady acknowledged to Aubrey, (MSS.) that she had practised this incantation, and was favoured with a vision about two or three years afterwards. Being one Sunday at church, up popped a young Oxonian into the pulpit; she instantly cried out to her sister, "that is the very face of the man I saw in my dream!" *Of course* he became her husband.

The tying of amatory knots, to unite the beloved person's affections with their own, was a common expedient amongst the Romans.

"Necte tribus nodis ternos, Amarylli colores;
Necte, Amarylli, modo; et Veneris, dic, vincula necte."

VIRG. Eclog. viii. 77.

"Knit with three knots the fillets, knit them straight,
And say, these knots to love I consecrate."

DRYDEN:

There is an ancient admonition, to note down whether the sun shine on *St. Vincent's Day*, (January 22d.)

"Vincenti festo si sol radiet memor esto."

"Remember on St. Vincent's day,
If that the sun his beams display."

And Dr. Foster presumes that it may have arisen from an idea that the sun would not shine inauspiciously "on that day on which the martyrdom of the saint was so inhumanly finished by burning," (p. 26.) It is probably, however, connected with the following old proverb of the vintager.

"A la fête de Saint Vincent
Le vin monte dans le sarment;
Et en va bien autrement
Si il gèle, il en descend."

The *conversion of St. Paul*, (January 25th,) has also, for whatever reason, been reckoned particularly ominous, with regard to the future weather of the year; a superstition which prevails in many countries. The following rhymes seem, in the middle ages, to have been familiar to all.

"Clara dies Pauli bona tempora denotet anni,
Si fuerint venti, designant prælia Genti,
Si fuerint Nebulae, pereunt animalia quæque
Si Nix, si Pluvia, designent tempora cara."

"If St. Paul's day be fair and cleare
It doth betide a happy yeare :
But if by chance it then should raine,
It will make dear all kinds of graine.
And if the clouds make dark the skie,
Then Neate and fowls this year shall die :
If blustering winds do blow aloft,
Then wars shall trouble the realm full oft."

From the condition of the weather on *Candlemas Day*, also, (February 2d,) the superstitious agriculturist has long been accustomed to estimate its character for the year. "There is a general tradition," says Sir Thomas Browne, "in most parts of Europe, that inferreth the coldnesse of succeeding weather from the shining of the sun on Candlemas Day, according to the provincial distich."

"Si sol splendescat Maria purificante
Major erit glacies post festum quam fuit ante."

And again—

"If Candlemas Day be fair and bright,
Winter will have another flight ;
But if Candlemas Day be clouds and rain,
Winter is gone and will not come again."

Candlemas Day is so called, from having been formerly celebrated with many candles, which, being sprinkled with holy water, and blessed, were supposed to possess the power of driving away evil spirits.

"Whose candelle burneth cleere and bright, a wonderous force and might
Doth in these candells lie, which, if at any time they light,
They sure believe that neither storme nor tempest dare abide,
Nor thunder in the skie be heard, nor any diuel spide,
Nor fearfull sprites that walk by night, nor hurt by frost and haile.""

These consecrated candles were even viewed as useful to the dying. To the question, "Wherefore serveth holy candles?" we find this reply: "To light up in thunder, and to blesse men when they lye a dying."†

Candlemas was the season at which the *Februa*, a feast of purification and atonement, was formerly held at Rome.‡ That which was purified by the sacrifice was called *februatum*, and the month in which the purification took place, *Februarius*. The evident relation between the two festivals of purification, is one amongst the most striking instances of the connexion between

* Barnaby Googe's Translat. of Naogeorg. f. 47.

† Brand's Popular Antiquities, l. 41.

‡ "*Februa* Romani discere piamina patres

Nunc quoque dant verbo plurima signa fidem."—OVID Fastor. l. ii. v. 19.

the original Ethnical, and subsequent Christian, rites and festivals, as to their periods of occurrence and identity of purpose.

In years when the moveable feasts fall early, *Shrovetide** and *Ash Wednesday*,† and their consequent feasts, occur about this period.

Shrove Tuesday is, in many parts, called *Pancake Tuesday*. After the people had made the confession required by the discipline of the ancient church, they were permitted to indulge in festive amusements, though still not allowed to partake of any repasts beyond the usual substitutes for flesh : hence the custom of eating pancakes and fritters at Shrovetide. By the vulgar, too, the Monday preceding is, especially in the north of England, called *Collop Monday*, from the primitive custom of regaling with eggs, on *collops*, or slices of bread, which were subsequently changed to collops of meat. On Pancake Tuesday, it seems to have been customary for boys, and others, to toss their own pancakes.

"It was the day whereon both rich and poore,
Are chiefly feasted with the self same dish,
When every paunch, till it can hold no more,
Is fritter-fill'd, as well as heart can wish :
And every man and maide doe take their turne,
And tosse their pancakes up for feare they burne,
And all the kitchen doth with laughter sound
To see the pancakes fall upon the ground."‡

In Scotland, Shrovetide is called *Fastronevin*, *Fastryngis-Ewyn*, *Fasternseen*, and *Fastenseen*. The Scotch designation is older than the English; for Shrovetide and Shrove Tuesday are not to be found in the Anglo-Saxon, nor does it appear that there is any particular name for that day in that language. The Anglo-Saxon word *faesten*, signifies a fast in general : but allied to the Scotch term denoting Shrove Tuesday, the Germans have *Fastnacht*, or *Fastelabend*, literally signifying *Fastnight*, or *Fasteven*. The terminations *eve*, or *een*, as in *Christmas Eve*, *New Year's Eve*, *Fasternseen*, or *Halloween*, were first employed, because originally all feasts commenced and ended with the evening. The day was primitively computed in this manner. "The evening and the morning was the first day," and the Jews still adhere to this mode of computation. We have a remnant of the same ancient custom in the words, *se'nnight*, and *fortnight*, instead of seven, or fourteen days.—(*Jamieson*.)

* So called from the Catholic custom of the people applying to the priests to *shrine* them, or hear their confessions, before entering on the fast the following day.

† So designated from the ancient custom of fasting in sack-cloth and ashes. From this period, i. e. from Ash Wednesday to Easter, is the quadragesimal fast of Lent, so named from the season of the year at which it falls. In the laws of Alfred, it is called *lengten faesten*, or the fast in spring.

‡ Pasquil's *Palinodia*, 4to. Lond. 1634.

Formerly, in Newcastle, on those days of authorized indulgence, the great bell of St. Nicholas was tolled at twelve o'clock at noon; when the shops and offices were immediately closed, and a little carnival (*carni vale*, farewell to flesh,) ensued for the remainder of the day,—and it is still kept as a sort of half holiday. It was, (Brockett, p. 159,) of old, a great period for *cock-fighting*, and *cock throwing*, and indeed of every loose and profligate recreation, excesses arising from the indulgences formerly granted by the church in consequence of the long season of fasting and humiliation, which commenced on the following day.

It is a vulgar belief, that the first two single persons who meet in the morning of *St. Valentine's day*, (February 14th,) may have a chance of becoming married to each other. St. Valentine's day has long been imagined the day whereon birds pair, and hence it has been considered peculiarly ominous to lovers; so that *billets doux*, sent on this day, have received the cognomen of the saint.*

The custom of choosing Valentines is an old one; it was practised in the houses of the gentry of England as early as 1476, and is referred to in the Harleian MS. by John Lydgate, the monk of Bury, in a poem written by him in praise of Queen Catherine, wife of Henry V.

“Seynte Valentine, of custom yeere by yeere
Men have an usaunce in this regioun
To loke and serche Cupides Kalendere,
And chose their choyse, by grete affeccioun,
Such as ben prike with Cupides mocioun
Takyng theyre choyse as theyr sort doth falle,
But I love oon whiche excellith alle.”

St. David's day, (March 1st) is a festival dear to every Welchman, being kept by them in honour of St. David, Bishop of Miney, in Wales, in commemoration of a signal victory obtained by them under the conduct of St. David, over the Saxons. The origin of the custom of wearing the leek in their hats, is explained in the following lines, affirmed by Dr. Forster, (p. 85) to have been found in an ancient MS. in the British Museum.

“In Cambria, 'tis said, tradition's tale
Recounting, tells how famed Menevia's priest,
Marshallled his Britons and the Saxon host
Discomfited, how the green leek the bands
Distinguished, since by Britons annual worn,
Commemorates their tutelary Saint.”

We may here refer to some of the ceremonies belonging to the moveable feasts, which occur about this period of the year; and

* Dr. Jamieson, (art. *Valentine*) has asserted that the term *Valentine*, is in England restricted to persons;—but he is in error. The *billets doux* are universally so denominated.

first to those of *Carlin Sunday*, (for so it is called in the north of England and Scotland) formerly denominated *Care Sunday*, which is *Passion Sunday*—it is the Sunday preceding Palm Sunday, or the second Sunday from Easter. On this day a custom obtains, and has long obtained, especially in the north of England and Scotland, of eating *Carlings*, which are gray peas, steeped all night in water, and fried the next day with butter.

“ There’ll be all the lads and the lasses,
Set down in the midst of the ha,
With sybows and ryfarts, and *carlings*,
That are both sodden and ra.”

RITSON.

In former times, the custom seems to have been general in England, as Palsgrave has the following phrase—‘ I parche pesyn as folkes vse in Lent.’*

Palm Sunday follows *Carlin Sunday*, and is that immediately preceding Easter. It was so denominated by the Church of Rome, because of palm branches being borne, in commemoration of those that were strewed in the way, when our Saviour entered Jerusalem. In many parts of England, the day is still celebrated by bearing boughs in procession; but in northern latitudes, the box, the olive, and the blooming willow, are used as substitutes for the palm; and this circumstance is doubtless the occasion of the last mentioned tree being, in Cumberland, called by the vulgar, the palm.

Mandy Thursday, or *Maundy Thursday*, is the Thursday immediately before Good Friday. It is the *Dies Mandati*, the day on which our Saviour gave his great *mandate* that we should love one another, and on which he washed the feet of his disciples. The practice of washing the feet was long kept up in the monasteries, and after the ceremony, liberal donations were made to the poor, of clothing and pieces of silver; refreshment was also given to them, to mitigate the severity of the long fast. A relic of this custom is still preserved in the donations dispensed at St. James’s, on this day.

Good Friday is an appellation peculiar to the English Church. *Holy Friday* or *Friday in Holy Week* being more ancient and general. Buns, with crosses stamped upon them, hence called

* Brand has offered the following, as the most probable explanation of the origin of the use of peas at this season. It is not satisfactory.

“ In the old Roman Calendar, I find it observed on this day, that a dole is made of *soft beans*. I can hardly entertain a doubt, that our custom is derived from hence. It was usual amongst the Romanists, to give away beans in the doles at funerals: it was also a rite in the funeral ceremonies of heathen Rome. Why we have substituted peas, I know not, unless it was because they are a pulse somewhat fitter to be eaten at this season of the year.” And he afterwards expresses himself still more forcibly. Having observed that, according to Erasmus, Plutarch held pulse, (*Legumina*) to be of the highest efficacy for invoking the *manes*, he adds, “ Ridiculous and absurd as these superstitions may appear, it is yet certain that *Carlings* deduce their origin from thence.” *Popular Antiq.* 1. 98, 99.

Cross-Buns, are usually eaten in London and other places, on this day, at breakfast.

Bryant carries this word, *Bun*, back to Heathenism. "The offerings," he says, "which people in ancient times, used to present to the gods, were generally purchased at the entrance of the temple; especially every species of consecrated bread. One species of sacred bread which used to be offered to the gods, was of great antiquity, and called *Boun*. Hesychius speaks of the *Boun*, and describes it, "a kind of cake with a representation of two horns." Julius Pollux mentions it after the same manner, "a sort of cake with horns." It must be observed, however, as Dr. Jamieson has remarked, that the term occurs in Hesychius in the form of *βους*, *bous*; and that, for the support of this etymon, Bryant finds it necessary to observe, that "the Greeks, who changed the *nu* final into a *sigma*, expressed it in the nominative *βους*, but in the accusative more truly *βουν*, *boun*."—*Supplement*, p. 159.

Considerable discussion has occurred from time to time, regarding the origin of the term Easter. Dr. Forster, (in another of his works, however, which will fall under notice hereafter), is of the common opinion, that as the word *east* signifies the place of rising, being so called "from its being that quarter where, owing to the earth's rotatory motion, the sun and stars appear to rise, so Easter signifies the time of rising, or the festival of the rising of Jesus Christ:" but this is more than doubtful; according to the venerable Bede, the term was of Heathen origin. "Easter monath" says he, "which is now rendered the Paschal month, formerly received its name from a goddess, worshipped by the Saxons and other ancient nations of the north, called *Eostre*, in whose honour they observed a festival in this month." "From the name of this goddess," he adds, "they now design the Paschal season, giving a name to the joys of a new solemnity, from a term familiarized by the use of former ages." The Anglo-Saxon term, is hence retained in our translation of the Bible, although Wiclif uses *Pask*. The ancient Germans called it *Oostrun*, and their posterity have changed the term to *Ostern*, *Osterdag*; also written *Ooster*, *Oosteren*, and *Oosterdag*. Thence the Paschal lamb is in their version often rendered *Osterlamb*. The entrance of the sun into Aries, has always been a time of festivity amongst the Persians, Egyptians, and others. The ancient Egyptians, observing the sun removing from their climates, began to fear that a day would arrive when it would quit them entirely,* and consequently they every year celebrated with rejoicing, the period when they observed its reascension.

* "Nam rudis ante illos nullo discrimine vita,
In speciem conversa, operum ratione carebat,
Et stupefacta novo pendebat lumine mundi:
Tum velut amissis mœrens, tum læta renatis
Sideribus."

Mamili Astronom. l. 64.

In Scotland, and in the north of England, a custom prevails, of boiling eggs hard, and dying or staining them of various colours, and giving them to children to amuse themselves with, especially on Easter Sunday. In these places children ask for their *pays eggs*, as they are termed, at this season, as for a fairing. The words, *pays, pas, pace, pase,* pasce, pask, pasch*, words used in North Britain to signify Easter, are clearly derived from the Hebrew, through the Greek *πασχα*. The Danish *paaske-egg*, and the Suis-Gothic *paskegg*, both likewise signify coloured eggs. Brand considers this custom as a relic of ancient Catholicism, the eggs being emblematic of the resurrection : but it is not improbable that it had its commencement in the times of heathenism ; the egg being a sacred symbol in the pagan worship. They are still used at the feast of Beltein, which is unquestionably of heathen origin, and are presented about the period of Easter, in many countries.

The reason why the *shamrock* is worn by the Irish on *St. Patrick's Day*, (March 17,) is thus, though not satisfactorily, assigned by Brand : " When the saint preached the Gospel to the pagan Irish, he illustrated the doctrine of the trinity by showing them a trefoil, or three leaved grass, with one stalk : this operating to their conviction, the shamrock, which is a bundle of this grass, was ever afterwards worn upon this saint's anniversary, to commemorate the event."

The feast of the *Annunciation*, (March 25th,) celebrates, in the Christian world, the message of the angel to the Virgin Mary : hence it is called *Lady Day*, and tenures, in some countries, are chiefly held from this and Michaelmas Day.

The last three days of March, are, by the superstitious, still deemed unlucky ; nor is it the only case with us of observing one day as bad, and another as good. Friday, for example, in the calendar of superstition, is a day of ill omen, on which no new work or enterprise must be commenced. From this cause, marriages seldom take place on it. It is singular that the same feeling prevails amongst the Birmans—"on this day no business must be commenced."†

" Friday's moon,
Come when it will it comes too soon."

Prov.

Saturday has been considered equally inauspicious. " Certane craftis men—will nocht begin their warke on the Satterday, certane schipmen or marinars will nocht begin to sail on the Satterday, certane trauelars will nocht begin their iornay on the Satterday, quhilk is plane superstition, because that God Almychty

* "The sextene day eftyr *Pase*
The States of Scotland gad ryd wase,"

WYNTOWN.

† Dr. Buchanan, in *Asiatic Researches*, vol. vi. 172.

made the Satterday as well as he made all other dayis of the wouke."*

This superstition is antique and ethnical. It was common amongst the Greeks, and so many distinctions were made between particular days, that it was a matter of importance *αισινεσθαι τας ημερας*—to observe the days. Hesiod refers to this custom—

ΑΛΛΟΤΕ ΜΗΤΡΩΝ ΠΕΝΑΙ ΗΜΕΡΑ, ΑΛΛΟΤΕ ΜΗΤΗΡ.

"Some days, like surly stepdames, adverse prove,
Thwart our intentions, cross what e'er we love;
Others more fortunate and lucky shine,
And, as a tender mother, bless what we design."†

The practice was also common in other nations, and particularly amongst the Romans, who had their *dies atri*, or unlucky days—was adopted by the early Christians from them, and continued, with modifications, until our own times. St. Paul, in his *Epistle to the Galatians*, (iv. 10.) reproves the Galatians for observing days, and months, and times, and years; which passage St. Austin thus explains:—

"The persons the apostle blames are those who say, 'I will not set forward on my journey because it is the next day after such a time, or because the moon is so: or I'll set forward that I may have luck, because such is just now the position of the stars. I will not traffic this month, because such a star presides, or I will, because it does. I shall plant no vines this year, because it is Leap Year, &c.'"

The three last days of March, O. S., have been denominated *Borrowing*, or *Borrowed Days*. Being generally stormy, our ancestors attempted to account for the circumstance, by pretending, that March *borrowed* them from April, that he might extend his power so much the longer.

"March borrowit fra Averill
Three days and they were ill."

They who are very superstitious, will neither borrow nor lend on any of those days, and if any one should propose to borrow from them, they would esteem it an evidence that the person wished to employ the article borrowed for the purposes of witchcraft against the lender.

With the Scotch Highlanders, the same idea of the borrowing days is commonly received, with this difference, that the days are considerably antedated, and the loan is reversed. With them, the *Faiolteach*, or three first days of February, serve many poetical purposes. They are said to have been *borrowed* for some purpose by February from January, *who* was bribed by February with three young sheep. These three days, by Highland reckoning, occur between the 11th and 14th of February, and it is accounted a most favourable prognostic for the ensuing year, that they should be as stormy as possible. If they should be fair, then

* Abp. Hamiltoun's Catechisme, 1551, fol. 22. 6. quoted by Jamieson.

† Potter's *Archæologia Græca*, vol. i. c. 17.

there is no more good weather to be expected through the spring.*

The custom of sending individuals on a Fool's errand, on the *first of April*, or *All Fools Day*, is general. The French have their *Poisson d'Avril*; and in the North of England and Scotland, they have their *April Gowks*, who are said to have been sent on a Gowk's errand. All these terms signify that an individual has been intentionally sent from place to place, on what is known to be a wild-goose chase. *Gauch* in the Teut. (Germ. *Geck*, Sw. *gak*,) signifies a fool; hence the words *Gowk* and *Gawky*. Jamieson, however, thinks that the expression, *a Gowk's errand*, although equivalent to a *Fool's errand*, does not originate immediately from *Gowk*, a foolish person, but from the cuckoo, which, in Scotland, bears that name. "Young people," he remarks, "attracted by the singular cry of the cuckoo, being anxious to see it, are often very assiduous to obtain their gratification. But, as this bird changes its place so secretly and suddenly—when they think they are just within reach of it, they hear it cry at a considerable distance. Thus they run from place to place, still finding themselves as far removed from their object as ever. Hence the phrase, "hunt the gowk," may have come to be used for any fruitless attempt, and particularly for those vain errands on which persons are sent on the first of April."†

The custom of making April fools, seems to be a relic of a high and general Pagan festival, at which the most unbounded hilarity prevailed; and, like many other of these periodical observances, seems to have an oriental parentage. Colonel Pearce has proved that it is an immemorial custom among the Hindoos, at a celebrated festival held in March, called the *Huli*, when mirth and festivity reign amongst every class, to send people on errands and expeditions that are to end in disappointment, and raise a laugh at the expense of the person sent. The last day of the *Huli*, is the general holiday. This festival is held in honour of the New-Year; and, as the year formerly began in Britain, about the same time, Maurice, in his *Indian Antiquities*, thinks that the diversions of the 1st day of April, both in Britain and India, had a common origin in the ancient celebration of the return of the vernal equinox, with festal rites.‡

On *St. George's Day*, (April 23d,) there seems to have been an ancient custom in Britain, to decorate the statue of the Patron Saint, but this is no longer continued; and, in *Reed's old Plays*, (vol. xii.) there is an allusion to another habit, amongst people of fashion, of wearing blue coats on this day, "probably because

* Grant's Superstitions of the Highlanders, vol. ii. p. 217.

† *Etymological Dictionary*. Art. *Gowk's errand*.

‡ *Asiatic Researches*, ii. 334.

blue was the national colour of Britain, over which St. George presides, and not in imitation of the clothing of the fields in blue, by the flowering of the Blue Bells, as some have supposed," (Forster, p. 185.)

St. Mark's Eve, (April 25th,) is likewise fruitful in superstitions. In the northern parts of England, it is usual for the common people to sit and watch in the church porch, from eleven o'clock at night, till one in the morning. On the third year, for this must be done thrice, it is supposed they will see the ghosts of all those who are to die the next year, pass by, into the church. When any one sickens, who is thought to have been seen in this manner, it is presently whispered about that he will not recover, for that such a one, who has watched St. Mark's eve, says so. This superstition is in such force, that, if the patients themselves hear of it, they almost despair of recovery. Many are said to have actually died by their imaginary fears on the occasion.

Another superstition, also of the North of England, is that of *Ass-ridlin*—the ashes being riddled or sifted on the hearth. Should any of the family die within the year, the mark of the shoe, it is supposed, will be impressed on the ashes; and many a mischievous wight has made some of the superstitious family miserable, by slyly coming down stairs, after the rest of the family have retired to rest, and marking the ashes with the shoe of one of the party.

Pennant has also observed, that, in North Wales, no farmer dare hold his team on St. Mark's day, because, as they believe, "one man's team was marked with the loss of an ox, which worked on this day."

A very ridiculous ceremony is likewise performed at Alnwick, in Northumberland—it consists in *leaping the well*, or going through a deep and noisome pool, on Alnwick Moor, called the Freeman's well—a *sine qua non* to the freedom of the Borough. On St. Mark's day, the aspirants proceed in great state, from the town to the moor, where they draw up in a body, at some distance from the water, and, on a signal being given, scramble through the mud with great labour and difficulty. Tradition says, that this strange and ridiculous custom, rendered more ludicrous by being performed in white clothing, was imposed by King John, who was bogged in this very pond.

The *first of May*, is a gala day with some of the classes of society in many countries, although, like most of the other festivals of the Calendar, it has suffered from the hand of time. Formerly, it was the custom for all ranks of people to go out early *a Maying*. Bourne tells us, that, in his time, in the villages in the North of England, the juvenile part of both sexes were wont to rise a little after midnight, and walk to some neighbouring

wood, accompanied with music, and the blowing of horns, where they broke down branches from the trees, and adorned them with nosegays and crowns of flowers. This done, they returned homewards, about the time of sunrise, and decked their doors and windows with the spoil. At an early period, this custom was observed by royal and noble personages, as well as by the vulgar. In *Chaucer's Court of Love*, we read, that early on Mayday, "*fourth goth at the Court, both most and lest, to fetche the flouris fresh, and braunch and blome.*" It was of old also the *Milk Maid's Festival*, and is still so, in some of the rural parts of England—the milk maids, on this day, going about with their garlands and music and dancing; but this is a very imperfect shadow of the original sports, for Maypoles were set up in the streets, with various martial shows, Morris dancing, and other devices—with which, and revelling and good cheer, the day was passed away. At night, they rejoiced, and lighted up bonfires. This Maypole was generally placed in some convenient part of every village, and stood, as it were, consecrated to the Goddess of Flowers, without the least violation offered to it, in the whole circle of the year.

Mayday is also, in London, the *Chimney-sweepers' Holiday*: when they decorate themselves with flowers, ribbands, and tinsel, and dance in the streets. This practice, Dr. Forster thinks, is likely to become obsolete, "as infant chimney-sweepers are going out of fashion, from the excessive cruelty necessary to be used in training them to climb the flues, and from the adoption of a machine to supersede the use of climbing children." (p. 211.) Of late, the march of intellect has been a fruitful topic of speculation; and many are the anecdotes, taken from the more humble departments of society, which have been adduced to prove it. We know of none, however, which might have been so triumphantly cited, had it occurred recently, as the one mentioned by the well-known Jonas Hanway, who, on inquiring of a chimney-sweeper's boy, on a May morning, why he was not enjoying himself, like the rest of his fraternity, received the unexpected reply—"because Master says it an't genteel!" Such a revolution of sentiment as this must be general, before we can expect to arrive at the consummation calculated upon by Dr. Forster.

These May Games are doubtless ethnic in their origin, and a continuance of the unboundedly licentious *Floralia* of the Romans.

On the first of May, O. S. a sort of Festival is observed in Scotland, which is called *Beltane*, or *Beltein*, and is thus described by Pennant:—

"On the first of May, the herdsmen of every village hold their *Beltein*, a rural sacrifice. They cut a square trench on the ground, leaving the turf in the

middle; on that they make a fire of wood, on which they dress a large caudle of eggs, butter, oatmeal, and milk, and bring, beside the ingredients of the caudle, plenty of beer and whiskey: for each of the company must contribute something. The rites begin with spilling some of the caudle on the ground, by way of libation: on that, every one takes a cake of oatmeal, upon which are raised *nine* square knobs, each dedicated to some particular being, the supposed preserver of their flocks and herds, or to some particular animal, the real destroyer of them: each person then turns his face to the fire, breaks off a knob, and, flinging it over his shoulders, says—"This I give to thee! preserve thou my horses: this to thee, preserve thou my sheep!" and so on. After that, they use the same ceremony to the noxious animals—"This I give to thee, O Fox! spare thou my lambs: this to thee, O hooded Crow! this to thee, O Eagle!" When the ceremony is over, they dine on the caudle, and, after the feast is finished, what is left is hid by two persons deputed for that purpose; but, on the next Sunday, they reassemble, and finish the relics of the first entertainment."

This feast bears a striking resemblance to the *Palilia*, a feast celebrated by the ancient Romans, on the 21st of April, in honour of Pales, the goddess of shepherds; or, according to some, in honour of the progress of the sun. (Ovid, *Fastor.* iv. 794.)

Ovid informs us, in the same book, that they who observed the *Palilia*, kindled fires, as the Scotch herdsmen do on Beltane day, and leapt over them.

"Certe ego transilui positas ter in ordine flammas."—Ovid.

A large cake, too, was prepared for Pales—

"Et nos faciamus ad annum
Pastorum dominæ grandia liba Pali."—*Ib.*

The Romans had also a beverage, somewhat resembling the caudle: they were to drink milk and the purple *sapa*, which, according to Pliny, is a new wine, boiled till only a third part remains:*

"Tum licet, apposita veluti cratere camella
Lac niveum potes, purpureamque sapan."—*Ib.*

The prayer, too, addressed to Pales, is very similar to that made use of, in Scotland, on the Beltane.

"Pelle procul morbos; valeant hominesque gregesque
Et valeant vigiles, provida turba, canes.
Neve minus multas redigam, quam mane fuerunt;
Neve gemam referens vellera rapta lupo."—*Ib.*

"Thee! goddess, O let me propitious find,
And to the *shepherd* and his *sheep* be kind.
Far from my folds, drive noxious things away,
And let my flocks, in wholesome pastures stray.
May I at night my morning's number take,
Nor mourn a theft the prowling *wolf* may make."—*Massey.*

The name *Beltein*, is, perhaps, immediately descended from the Gaelic, *Baal*, which signifies a globe; and the observance itself,

* Tour in Scotland, 1769, p. 110. Jamieson's Etymological Dictionary, Art. *Beltein*.

affords another instance of the connexion between the ceremonies of the eastern, and those of the more western nations. *Bel*, or *Belus*, is the great Asiatic God; and is, in the Punic and Assyrian, applied to the sun, one of whose great festivals was celebrated at this season. All these, Asiatic and European, were probably instituted in honour of that luminary, whose return, in his apparent annual course, was celebrated for the reasons already mentioned, as well as on account of his having such a visible influence, by his genial warmth, on the productions of the earth. That the Caledonians paid a superstitious respect to the sun, is evident not only from the sacrifice at Beltein, but upon many other occasions. In Sweden, on the last day of April, the evening preceding the Scotch Beltein, the country people light great fires on the hills, and the first of May is likewise observed. The following lines, from the second Battle of Hastings, would prove that the custom was likewise druidical. Speaking of the druidical remains at Salisbury Plain and Stonehenge, it is observed:—

“Here did the Brutons adoration paye
To the false god whom they did Tauran name,
Dightyngge hys altarre with greete fyres in Maie
Roastyngge their vycualle round aboute the flame.”

The *Deasil*,* is one of the Highland superstitions with regard to the sun. It means the turning from east to west, or according to the course of the sun, and is a custom of high antiquity in religious ceremonies. When a highlander goes to bathe or to drink water out of a consecrated fountain, he must approach by going round the place from *east to west*, on the south side, in imitation of the apparent diurnal motion of the sun. When the dead are placed in the grave, the grave is approached by going round in the same manner. The bride, too, is conducted to her future spouse, in the presence of the minister, and the glass goes round in the course of the sun. This is called in Gaelic, going round the right or the lucky way. The opposite is of course the wrong or unlucky way; and if a person's meat or drink accidentally enters the windpipe, or “goes the wrong way,” as it is usually termed, they instantly cry out *Deisheal!*—an ejaculation expressive of a wish that it may go the right.

This superstition was in vogue amongst the Romans.

The custom of sending drink round a company from left to right, has been supposed to be a vestige of this superstition, and there are many, at the present day, who would reckon it unlucky to take the opposite course.

The *Antitheton* of the *Deasil* is the *Widdersinnis*.† The

* Pennant derives this term from Gael. *Deas*. or *Des*. the right-hand, and *syf*. the sun.

† *Teut. weder-sins*, contrario modo.—*Kilian*.

Highlanders ascribe some preternatural virtue to that motion which is opposed to the course of the sun, or to what grows in that way. This is particularly attended to in magical ceremonies, and is mentioned as the mode of salutation given by witches and warlocks to the Devil. Ross, in his additions to the ancient song, "*The Rock and the wee pickle tow*," makes the spinster not only attend to the wood of her rock, that it should be of the *Rantry*, or mountain ash, itself, as we shall see, a powerful specific against the effects of witchcraft, but also to the direction of its growth :

"I'll gar my ain Tammy gae down to the how,
And cut me a rock of a *widdershins* grow,
Of good *rantry-tree*, for to carry my tow,
And a spindle of the same for the twining o't."

Again, on Mayday there is another rite, still pretty generally observed throughout Scotland, by the superstitious or by the youthful, merely as a frolic—it is the gathering of *Maydew*, to which some ascribe a *happy*, others a *medical* influence. Early in the morning they sally out in numbers to gather it.

We have already seen that the Beltein is not confined to Scotland, but that it is an Oriental as well as a Scandinavian ceremony ; it was also formerly known in some parts of the north of England. In the West Riding of Yorkshire, for example, they have the expression, *Baal-hills* to signify Hillocks on the Moors where fires have formerly been, and several places on the borders of Craven seem to have received their names from these idolatrous rites, (*Horæ momentæ Cravenæ*, p 56.)

The play of *Robin Hood*, was a performance in the May games, in which a person representing that bold outlaw, presided as Lord of the May, attended by maid Marian, his faithful mistress, as Lady of the May, and by persons appropriately dressed, denominated Robin Hood's men. Bishop Latimer complains in one of his sermons, that, coming to preach in a certain town, on a Holiday, he found the church door locked, and was told the parish could not hear him that day, for they were gone to gather for Robin Hood, it being Robin Hood's day. The good Bishop says, that, notwithstanding his rochet, he was fain to give place to Robin Hood. King Henry VIII. was entertained with a May game at Shooter's Hill, by the officers of his guards, amounting to two hundred, clothed in green, headed by one who personated Robin Hood. He met the King as he was taking his morning ride, attended by the Queen and nobility of both sexes; and, on inviting his majesty to see how he and his companions lived, the royal train was forthwith conducted by the archers, blowing their horns, to a green wood under the hill, and ushered into an arbour of boughs, formed into chambers, and covered with flowers and sweet herbs, where Robin Hood, apologizing for the want of more delicate refreshment, said to the king,

"Sir, we outlaws usually breakfast upon venison, and have no other food to you," and the King and Queen sate down, and were served with venison and wine. They were well pleased with their entertainment, and on their departure were met by two ladies, splendidly apparelled, as the Lady May and the Lady Flora, riding in a rich open chariot, who, saluting the King with divers goodly songs, brought him to Greenwich. This game was also common in Scotland, but as numerous meetings for disorderly mirth are apt to give occasion to tumult, it was found necessary to repress it by statute in 1555.

At these times, a *gathering for Robin Hood*, as it was termed, took place; a number of persons going through the country to collect money for defraying the expenses of the exhibition, and for purchasing dresses in which the actors were to appear.*

Some of the superstitions connected with the first of May, seem to be transferred to the third, which is *Rood Day*, or *Rude day*—(A. S. *Rode*, a cross)—the day of the invention of the cross. Some old Scotch women are careful, on the eve of this day, for the purpose of preserving their work from the power of witchcraft, to have their rocks and spindles made of the Roan tree, (the *Sorbus sylvestris Alpina*, L.) which probably received its name from *Runa*, incantation, because of the use made of it in magical arts. With the Greeks, the Rhamnus, probably a species of buckthorn, was the great ἀλεξικακος, or keeper off of evil spirits, against which it was reputed a sovereign amulet. When any person was seized with a dangerous distemper, it was usual to fix over his door a branch of Rhamnus and laurel: which custom is quoted by Potter, as mentioned by Laërtius, in his life of Bion the Boristhenite:

Ῥαμνον τε, καὶ κλαδὸν δαφνῆς

Ἵπερ θύρην ἐθήκειν

Ἀπαντα μάλλον, ἢ θανεῖν,

Ἐτοιμος ὧν ὑπουργεῖν.

"The door of Bion's house is seen
With Rhamnus and with laurel green;

* The following curious estimates are from Lyon's Environs of London:

1. Hen. 8.	Reed. for Robyn Hod's gaderyng,	4 marks.
5. Hen. 8.	Reed. for Robin Hood's gaderyng at Croydon,	0. 9. 4.
11. Hen. 8.	Paid for three broad yerds of rosett for making the frer's cote,	0. 3. 6.
—————	Shoes for the mores daunsars, the frere and mayde Maryan, at 7d. a payre,	0. 5. 4.
16. Hen. 8.	Reed. at the church-ale and Robynhode all things deducted,	3. 10. 6.

This extract, or indeed any one, taken at random from the old English writers, in which the same words frequently recur, shows that our ancestors had no fixed standard of orthography.

That should death come to break his rest,
These may deter the intruding guest."

That the former was the great preservative against evil spirits, is shown in a fragment of Euphorio:

Ἀλεξίκακον φνε ῥαμνον.

"Produced the Rhamn, against mischievous ills
An antidote."

On Rood day, many persons in Scotland hang up branches of the roan tree above the doors of their cow houses, and tie them round the tails of their cattle with scarlet threads. Indeed great attention to their cows is supposed to be necessary, as both witches and fairies are believed to be at work in *milking the tether*, an expression which implies a power possessed by witches of carrying off the milk of any one's cows, by pretending to perform the operation of milking upon a *hair tether*; an idea, however, not confined to Scotland, but obtaining, at the present day, amongst the vulgar in Sweden.

To make their cows *luck*, or prosper, it is believed to be only necessary to milk a little out of each teat upon the ground, but that the reverse will be the case, if the ceremony be neglected. This is evidently a Pagan rite, being a libation, either to the old Gothic or German deity, Hertha—the Earth, or to the fairies. A similar superstition prevails in the north of Scotland, with regard to the *Pankail*—a broth made of coleworts. Of old, in preparing this, the meal which rose as the scum of the pot, was not put into any dish, but thrown among the ashes: from the idea, that it went to the use of the fairies, who were supposed to feed upon it—a ceremony resembling one amongst the ancient Romans, who, in order to consecrate any kind of food, generally threw a part of it into the fire, as an offering to the *Lares*, or household gods, who were thence called *Dii Patellarii*.

On Rood day, also, great virtue is ascribed to *May dew*. In every part of Scotland, Rude day does not signify the same period. In the old Scotch acts, it is applied to the 14th of September, O. S., (25th September, N. S.) and to the present day, the same designation holds in Lanark, Roxburgh, and other shires. From this day, (in September,) a calculation is made as to the state of the atmosphere: for it is said, that if the deer lie down dry and rise dry on Rude day, there will be *sax owks* of dry weather.

Whitsuntide is the only moveable feast which falls about this period; so called, because the converts, newly baptized, appeared from Easter to Whitsuntide in white—hence *White Sunday*—Teut. *Weissentag*.—(Skinner.)

Whit Monday and Whit Tuesday, are observed as festivals, for the same reason as Monday and Tuesday in Easter week. Their religious character is, however, almost obsolete, and they

are now kept as holidays, in which the lower classes still pursue their favourite diversions. The Whitsun-ales, and other customs formerly observed at this season, are almost wholly obsolete.

On *St. Urban's Day*, (May 25th,) we are told by J. B. Aubanus, that in many parts of Germany, "all the vintners and masters of vineyards set a table either in the marketstead, or in some other open and public place, and covering it with fine naper, and strawing upon it greene leaves and sweete flowers, do place upon the table the image of that holy bishop, and then, if the day be cleare and faire, they crown the image with great store of wine; but if the weather prove rugged and rainie, they cast filth, mire, and puddle water upon it: persuading themselves that, if that day be faire and calme, their grapes, which then begin to flourish, will prove good that year; but if it be stormie and tempestuous, they shall have a bad vintage."—(*Forster*, p. 250.)

On the *Vigil of St. John the Baptist*, (June 23d,) the ancient custom of celebrating the summer solstice, common to almost all nations, by lighting bonfires, is still kept up in many parts of England. Numerous pagan rites, adopted afterwards by the Christians, are still observed on Midsummer Eve and Day. According to Durand, there is a curious custom of rolling a large wheel, bound with straw set on fire, down a hill, on this day, evidently intended to signify, that the sun was beginning to roll down again from its greatest height. Naogeorgus refers to the same, and adds, that the folks used to imagine that they could roll down and get rid of their ill luck with this wheel. The heathen rites of this festival, at the summer solstice, may be considered as a counterpart of those used during the winter solstice, at Yuletide. In the old Runic fasti, a wheel was used to denote the festival of Christmas, and Gebelin derives Yule from a primitive word, carrying with it the general idea of revolution, and of a wheel; and it was so called, says Bede, because of the return of the sun's annual course after the wintry solstice. This wheel is common to both festivities. The old rites at this period are well described by Barnaby Googe.

"Then doth the joyfull feast of John the Baptiste take his turne,
When bonfires great, with loftie flame, in every towne doe burne :
And young men round about with maides doe daunce in every streete,
With garlands wrought of motherwort, or else with vervain sweete,
And many other flowres faire, with violets in their handes,
Whereas they all do fondly thinke, that whosoever standes,
And throw the flowres beholdes the flame, his eyes shall feel no paine.
When thus till night they daunced have, they through the fire amaine,
With striving mindes doe runne, and all their hearbes they cast therein,
And then with wordes devout and prayers they solemnely begin,
Desiring God that all their illes may there consumed bee :
Whereby they think through all that yeare from agues to be free.
Some others get a rotten wheele, all worne and cast aside,
Which covered round about with straw and tow, they closely hide :

And caryed to some mountaines top, being all with fire light,
 They hurle it down with violence, when darke appears the night :
 Resembling much the Sunne, that from the heavens down should fal,
 A straunge and monstrous sight it seemes, and fearfull to them all :
 But they suppose their mischiefes all are likewise throune to hell,
 And that from harmes and daungers nowe in safetie here they dwell.”

There are many absurd superstitions attached to the Midsummer Eve. For instance, it is imagined that any unmarried woman, fasting and at midnight, laying a clean cloth, with bread, cheese, and ale, and sitting down as if going to eat, the door being left open, will see the person whom she is afterwards to marry, come into the room, and drink to her, by bowing; and afterwards, filling the glass, he will leave it on the table, and making another bow, will retire.

Mr. Aubrey has given us the following:—

“The last summer, on the day of St. John the Baptist, 1694, I accidentally was walking in the pasture behind Montague house; it was twelve o'clock. I saw there, about two or three and twenty young women, most of them were habited on their knees, very busy as if they had been weeding. I could not presently learn what the matter was. At last a young man told me that they were looking for a coat under the root of a Plantain, to put under their heads that night, and they should dream who would be their husbands; it was to be found that day and hour.”

Again: according to a custom common over Germany, every young girl plucks a sprig of St. John's Wort, (*Hypericum*,) and sticks it into the wall of her chamber. Should it, owing to the dampness of the wall, retain its freshness and verdure, she may reckon upon gaining a suitor in the course of the year; but should it droop, the popular belief is, that she also is destined to pine and wither away.

The following version of some lines from a German Almanac, descriptive of this superstition, is beautiful.

“The young maid stole through the cottage door,
 And blushed as she sought the plant of power;
 ‘Thou silver glow-worm, O lend me thy light!
 I must gather the mystic St. John's Wort to night,
 The wonderful herb whose leaf will decide
 If the coming year shall make me a bride.’

“And the glow-worm* came
 With its silvery flame,
 And sparkled and shone,
 Through the night of St. John,
 And soon as the maiden her love-knot tied,
 With noiseless tread
 To her chamber she sped,
 Where the spectral moon her white beams shed :

“Bloom here—bloom here, thou plant of power,
 To deck the young bride in her bridal hour.
 But it drooped its head, that plant of power,
 And died the mute death of the voiceless flower ;

* The *glow-worm* is denominated in German—*Johannis-Würmgen* or *Würmlein*—*St. John's worm*.

And a withered wreath on the ground it lay,
 More meet for a burial than bridal day,
 And when the full year had flitted away
 All pale on her bier the young maid lay !

“ And the glow-worm came
 With its silvery flame,
 And sparkled and shone,
 Through the night of St. John,

And they closed the cold grave o’er the maid’s cold clay.”

The forty days’ rain, now ascribed to St. Swithin, formerly belonged to this Saint. An old memorial asserts—“*Pluvias S. Joannis 40 dies pluvii sequuntur*,”—it is added, “*certa nuncum pernicies*.”

Every one of our readers must be acquainted with the prognostications connected with *St. Swithin’s day*, (July 15.)

“ Saint Swithin’s day, gif ye do rain
 For forty daies it will remain
 Saint Swithin’s day, an ye be fair
 For forty daies ’twill rain na mair.”

So saith an old Scotch proverb. In the time of old Ben, it was an ancient tradition,* and is asserted to have taken its rise from the following circumstances. Swithin or Swithum, Bishop of Winchester, who died in 868, desired that he might be buried in the open churchyard, not in the chancel of the Minster, as was usual with the Bishops, and his request was complied with ; but the monks, on his being canonized, considering it disgraceful for the Saint to lie in a public cemetery, resolved to remove his body into the choir, which was to be done with solemn procession, on the 15th of July ; it rained, however, so violently, for forty days together, that the design was abandoned. (Forster, p. 344.)

The vulgar tradition adds, that the monks, finding it vain to contend with a Saint who had the elements so completely under his control, gave him his own way ; so soon as their intention was abandoned, he became appeased, though not completely so, and hence still reminds the descendants of those obstinate people of the permanency of his power. In the north of Scotland, this day is termed *St. Martin of Bullion’s day*,† and the same superstition is there prevalent. It has evidently been founded on popular observation ; and certainly, in a majority of the British

* Sordido, who reposed considerable confidence in the predictions of his *penny almanack*, like too many amongst ourselves, exclaims, “O here, *St. Swithin’s*, the 15th day, variable weather, for the most part rain, good ! for the most part rain : why, it should rain forty days after, now, more or less, it was a rule held, afore I was able to hold a plough, and yet here are two days no rain : ha ! it makes me muse.” *Every man out of his humour*. Act 1. Scene 1.

† It is not clear why *St. Martin* is designated of *Bullion*. Du Cange calls this day—*Festum Sti. Martini Bullientis*, adding “*vulgo etiamnum, S. Martin Bouillant*,” probably so called on account of the warmth of the season in which the feast falls.

summers, there is a showery period at this season : farther there is no truth in the tradition.

Lammas day (August 1st,) seems, etymologically, to be a corruption of Loaf Mass; and is a remnant of a very old British custom of celebrating the gifts of Ceres. In Orosius we have *klaf-maesse* for *panis festum vel frumenti primitiarum festum Calendarum Augusti*, and in the Anglo-Saxon Chronicle, the word is spelled *plam maesse*, whence, by rejecting the aspiration, we have *Lammas*. *Maesse*, mass in Anglo-Saxon, merely signifies a festival, and hence our names Christmas, Candlemas, Martinmas, &c.

“Gebelin, in his *Allegories Orientales* tells us, that as the month of August was the first in the Egyptian year, the first day of it was called *Gule*, which, being Latinized, makes *Gula*. Our legendaries, surprised at seeing this word at the head of the month of August, did not overlook, but converted it to their own purpose. They made out of it the feast of the daughter of the Tribune Quirinus, cured of some disorder in *Gula*, the throat, by kissing the chains of St. Peter, whose feast is solemnized on this day. So Sir Henry Spelman, ‘*Gula Augusti sæpe obvenit in membranis antiquis præsertim forensibus pro festo S. Petri ad vincula: quod in ipsis calendis Augusti celebratur. Occasionem inter alias Durandus suggerit lib. vii. cap. 19. Quirinum Tribunum filiam habuisse gutturosam; quæ osculata, iussu Alexandri Papæ (a B. Petro sexti) vincula quibus Petrus sub Nerone coercitus fuerat, a morbo liberatur.*’” Forster, p 381.

We can give only a passing notice to the celebration of *Harvest Home*, which, although varying in every country, is a period of joyful festivity in all; the many rural ceremonies, however, formerly appertaining to it, are fast going out of use. In different parts of Great Britain, it has various denominations—*Mell supper**—*Kern supper*—*Chum supper*, and *Feast of Ingathering*. In all Christian countries, when the fruits are gathered in, and placed in their proper repositories, it is common to provide a plentiful supper for the reapers and servants of the family. At this entertainment, all are, in the modern revolutionary idea of the word, perfectly equal. In the northern parts of England, a *Mell Doll*, or image of corn, dressed like a Doll, is carried in triumph, amidst the frantic screaming of the women, on the last day of reaping. In some places, this is called a *Kern* (perhaps properly *Corn*) Baby. There is also occasionally a harvest queen: thought to be a representation of the Roman Ceres—apparelled in great finery, and crowned with flowers; with a scythe in one hand and a portion of corn in the other. All these ceremonies have arisen, like the *Αλωα* and *Συγκομισηρια* of the

* Perhaps from *Mael* (Teut.)—convivium refectio, pastus.

Greeks, from gratitude to the gods, by whose blessing they enjoyed the fruits of the ground.

By *St. Bartholomew's day*, (August 24,) the showery period has generally passed away, and the weather has become more favourable, or as Dr. Forster has affectedly and ridiculously expressed it "the watery spell of a weeping St. Swithin has nearly ceased to draw down the tears of Cælum, the forty days' lamentation ending yesterday." (p. 426). Hence the proverb.

"All the tears that St. Swithin can cry,
St. Bartlemy's dusty mantle wipes dry."

Michaelmas, (Sept. 29th,) is one of the regular quarter days in some countries, for settling rents, &c.; but it is no longer remarkable for the hospitality which once attended it. Stubble geese being, in England, esteemed in perfection early in the autumn, most families have one dressed on this day. Numerous inquiries have been made by antiquaries into the origin of this custom, none of which are satisfactory, and it probably had no other meaning than that which we have assigned. Geese being in some countries later in being ready for the table, we shall find that they are eaten at a later period. They seem to have formed a staple article in the way of presents from the tenant to the landlord.

"And when the tenautes come to pay their quarter's rent,
They bring some fowle at Midsummer, a dish of fish in Lent,
At Christmasse a Capon, at *Michaelmas* a goose;
And somewhat else at Newyere's tide, for fear their lease flie loose."

GASCOIGNE.

There is a singular custom in Yorkshire, on *St. Luke's Day*, (October 18th)—that of collecting children with small whips, to whip the dogs about the streets—hence called *Whipdog Day*. This custom was very common in York, formerly, and is not yet discontinued. A friend, now by us, saw this ceremony performed, not many years ago, at Hull. Ellis, in his edition of Brand, (ii. 323,) asserts it to have originated in the following accident:—"The tradition which I have heard of its origin, seems very probable: that, in times of popery, a priest celebrating mass at this festival, in some church in York, unfortunately dropped the Pax after consecration, which was snatched up suddenly, and swallowed by a dog that lay under the altar table. The profanation of this high mystery, occasioned the death of the dog; and a persecution began, and has since continued, on this day, to be severely carried on against his whole tribe in our city." (York.)

St. Crispin's Day, (October 25th,) is a great holiday in many places, amongst the shoemakers, and the origin of this is thus assigned. Two brothers, Crispinus and Crispianus, were born at Rome; whence they travelled to Soissons, in France, about the year 303, to propagate the Christian Religion. Being, however, desirous of rendering themselves independent, they

gained a subsistence by shoemaking. The Governor of the town, having discovered that they privately maintained the Christian faith, and endeavoured to make proselytes of the inhabitants, ordered them to be beheaded, about the year 308. From this time, the shoemakers have chosen them for their tutelary saints.

With reference to this day, Dr. Forster has introduced the following anecdote of Charles V. This sovereign, in his intervals of relaxation, used to retire to Brussels; and, being desirous of knowing the sentiments of his meanest subjects, concerning himself and his administration, he frequently went, *incog.*, and mixed himself in such companies and conversations as he thought proper. One night, his boot requiring mending, he was directed to a cobbler. Unfortunately, it chanced to be St. Crispin's holiday; and, instead of finding the cobbler inclined for work, he was in the height of his jollity among his acquaintance. The Emperor acquainted him with his wishes, and offered him a handsome gratuity. "What! friend!" says the cobbler, "do you know no better than to ask one of our craft to work on St. Crispin's day? Was it Charles himself, I'd not do a stitch for him now: but if you will come in and drink St. Crispin, do and welcome: we are as merry as the Emperor can be." The sovereign accepted the offer, and, as a return for his hospitality, gave the Cobblers a coat of arms—a boot with an imperial crown upon it. In Flanders, a chapel is still, we are informed, to be seen, with a boot and imperial crown on it; and, in all processions, the Company of Cobblers takes precedence of the Company of Shoemakers.—Forster, p. 585.

The day is still observed as a festival by the corporate body of cordwainers, or shoemakers, of London.

The Feast of *St. Simon and St. Jude*, (October 28th,) has also been considered a rainy period, probably because observation had shown that the autumnal rains usually commenced in Great Britain on or about that day. In Paris, a trick seems formerly to have been played off, similar to those generally practised on the first of April. "A la Saint Simon et Saint Jude on envoi du Temple les Gens un peu simple, demander des Nefles," (*Medlars*,) "afin de les attraper et faire noircir par des valets."*

All Hallows Eve, or Halloweven—the *Vigil of All Saints Day*, (October 31st,) is a busy period among the superstitious. To *haud Halloween*, is, in Scotland, to observe the childish or idle rites appropriated to this evening.

"Some merry, friendly, countra fólks
Together did convene
To burn their nits, an pou their stocks,
An' haud their Halloween."

Burns's Hallowe'en.

* *Sauval Antiq. de Paris.* Tom. ii. p. 617.

Nuts and apples compose the chief materials of the entertainment on this night; and, from the custom of flinging the former into the fire, or of cracking them with the teeth, it doubtless had its vulgar name of *Nutcrack Night* given to it. The nuts are thrown in pairs into the fire, as a love divination, by young people, in many parts of Great Britain, anxious to know their future lot in the connubial state. If the nuts lie still and burn together, the circumstance prognosticates a happy marriage, or at least a hopeful love; if, on the contrary, they bounce and fly asunder, the sign is unpropitious to matrimony.

“The auld guidwife’s weel hoordet nits
Are round an’ round divided,
An’ monie lads’ and lasses’ fates
Are there that night decided.

“Some kindle couthie, side by side,
An’ burn thegither trimly;
Some start awa’ wi’ saucy pride,
An’ jump out owre the chimlie.”—*Ib.*

From this unwarrantable curiosity as to their future lot, many thoughtlessly perform other rites of the most idolatrous character, in expectation of seeing the person who is to be their future husband or wife, or of hearing his or her name repeated. They who are anxious to find these particularly described, may refer to the Notes attached to Burns’s beautiful poem on this subject. The more ignorant and superstitious, in Scotland, are persuaded, that on the eve of All Saints, the invisible world has peculiar power; that witches and fairies and ghosts are all rambling abroad; and that there is no such night in the year for intercourse with spirits, or for obtaining insight into futurity.

We have already alluded to the custom amongst almost all nations, of employing fires and torches in their ceremonies. In some parts of Scotland, that of lighting fires is still followed on Hallowe’en, and is termed a *Hallowe’en bleeze*. These fires are used as means of divination, and are evident remains of Heathenism, apparently of *Druidism*.

In the Orkneys, when the beasts are sick, the inhabitants sprinkle them with a factitious water, with which they also sprinkle their boats, when their fishing does not turn out prosperously: this they do especially on Hallowe’en, and, in addition, place a cross of tar upon them—to make them “*luck*.”

At this time, too, was held, it was formerly believed by the vulgar, a *Hallowmass Rade*—the word *Rade*, (A. S. *rad*, *rade*, *equitatio*, *iter equestre*,) evidently referring to their riding, by virtue of their enchantment, to these assemblages.

All Saints Day, *Hallowsday*, *Hallowmass*, or *Hallowtide*, (November 1st,) the festival observed in the Christian Church in commemoration of all the Saints, was formerly dedicated by

superstition to the angel presiding over fruits, seeds, &c., and thence called in Saxon *Lamas ubhal*—the day of the apple fruit: and being pronounced *lamasool*, it has been gradually corrupted to *Lambswool*. *Lambswool* is in Ireland a constant ingredient at the entertainments on All Saints Day, and is used to designate a compound, consisting of the pulp of roasted *apples*, mixed with sugar and nutmeg, the relic of the commemoration of the old *Mas ubhal*.

All Souls Day, (November 2d,) is a festival observed in the Romish Church, when prayers are offered up for all departed souls. This ceremony corresponds with the *Nekyia* and *Nekesia*, or *Nekesia*, and the *Feralia* and *Lemuria*, or *Remuria*, of the Romans, in which they sacrificed in honour of the dead; offered up prayers and made oblations to them. The *Feralia* was celebrated on the 21st of February, but the Church of Rome translated it in her calendar to the first of November. It was originally designed to procure rest and peace to the souls of the departed.

“Est honor et tumulis; animas placare paternas,
Parvaeque in exstinctas munera ferte pyras.
Parva petunt manes: pietas pro divite grata est
Munere: non avidos Styx habet ima Deos.
Tegula projectis satis est velata coronis
Est sparsæ fruges: parvaeque mica salis.”

OVID Fast. ii. 533.

“Tombs have their honours too. Our parents crave
Some slender presents to adorn their grave.
Slender the presents which the ghosts we owe;
Those powers observe not what we give, but how;
No greedy souls disturb the happy seats below:
They only ask a tile with garlands crown'd,
And fruit and salt to scatter on the ground.”

The feeling, possessed by the Romans, that the manes of their departed friends came and hovered over their graves, and smiled upon the humble offerings made to them by the hand of affection, still exists, but more strongly in Catholic countries. The custom of bedecking the graves with garlands of flowers, was common with both the Greeks and Romans, and is referred to every where in the poets.

Martinmas—the *feast of St. Martin*, (November 11,) was anciently a day of great festivity: it was the old quarter day, and as it occurred at a period when geese are in high season, the landlords were formerly in the habit of entertaining their tenants with geese, then only kept by opulent persons. In some parts of the continent of Europe, St. Martin's day is celebrated by a feast of goose, as that of St. Michael is in Great Britain. This custom is referred to in various proverbial distichs:

“Ligna vehit, mactatque boves, et latus ad ignem
Ebria Martini festa November agit.”

Ad postem in Sylvam porcos compellit, et ipse
Pinguibus interea vescitur Anseribus."

The vulgar expression, "*My eye and Betty Martin*," seems to be a corruption of "*Mihi beate Martine*"—an invocation to this saint.

On *St. Andrew's Day*, *Andyr's Day*, *Androismess*, or *Andermess*, (November 30,) the day dedicated to St. Andrew, the Patron Saint of Scotland, singed sheep's heads, (a favourite dish with the Scotch,) are borne in the procession before the Scots in London on this day.*—(*Forster*, 674.)

The sixth of December is the *festival of St. Nicholas*. St. Nicholas, Bishop of Myra, in the fourth century, was a saint of the highest virtue, even from his earliest infancy. He has always been considered the patron of scholars and of youth, the reason of which has been thus given by the Revd. W. Cole, from a life of St. Nicholas, 3d edition, 4to., Naples, 1645. An Asiatic gentleman, sending his two sons to Athens for education, ordered them to wait on the Bishop for his benediction. On arriving at Myra with their baggage, they took up their lodgings at an inn, proposing, as it was too late in the day, to defer their visit till the morrow; but, in the meantime, the innkeeper, to secure their effects to himself, killed the young gentlemen, cut them into pieces, salted them, and intended to sell them for pickled pork. St. Nicholas being favoured with a sight of these proceedings in a vision, went to the inn, and reproached the landlord for his crime, who, immediately confessing it, entreated the Saint to pray to heaven for his pardon. The Bishop, moved by his confession and contrition, besought forgiveness for him, and supplicated restoration of life to the children. Scarcely had he finished, when the pieces reunited, and the resuscitated youths threw themselves from the brine tub at the feet of the Bishop: he raised them up, exhorted them to return thanks to God alone, gave them good advice for the regulation of their future conduct, bestowed his blessing upon them, and sent them to Athens, with great joy, to prosecute their studies.†—(*Hone*, p. 193.)

Hospinian remarks, that it was common, on the vigil of St.

* In the Statistical Account of Scotland, vol. xxiii. p. 359, we are informed, that to Dudington Parish, county of Edinburgh, and distant from Edinburgh a little more than a mile, many of the opulent citizens resort in the summer months to feast upon one of the ancient homely dishes of Scotland, for which the place has been long celebrated. The use of singed sheep's heads, boiled or baked, so common in this village, is supposed to have arisen from the practice of slaughtering the sheep fed on the neighbouring hill for the market, removing the carcasses to town, and leaving the head, &c. to be consumed in the place.—(*Forster*, *ibid.*)

† In old representations, the Bishop is always depicted with the children rising from the tub—the common people, however, in Catholic countries, generally misunderstand these emblems. With them the boys in the tub being considered as sailors in a boat.

Nicholas, for parents to convey secretly various kinds of presents to their children, who were taught to believe that they owed them to the kindness of St. Nicholas and his train, who came in at the windows and distributed them. This custom, he says, originated in the legendary account of that Saint's having given portions to three daughters of a poor citizen, whose necessities had driven him to an intention of prostituting them, and this he effected by throwing a purse filled with money privately at night in at the father's bed-chamber window to enable him to portion them out honestly.

A singular ceremony connected with this day, was the election of the *Boy Bishop*. In many places, the scholars, on the feast of St. Nicholas, were in the habit of electing one of their number to play the Boy Bishop, and two others for his deacons. He was escorted to church, wearing his mitre, by the other boys, in solemn procession, where he presided at the worship, and afterwards he and his deacons went about singing from door to door, and collecting money: not begging, but demanding it as a subsidy. This seems to have been a very ancient practice. In 1274, the Council of Nice prohibited the choosing of the Boy Bishop, though so late as the time of Hospinian, who wrote in the 17th century, it was customary at schools, dedicated to Pope Gregory the Great, who was also a patron of scholars, for one of the boys to be the representative of Gregory on the occasion, and to act as Bishop, with certain companions as his clergy. Anciently too, on this day, the same ceremony was performed by the choir boys in cathedrals, whose office and authority continued from the Feast of St. Nicholas to that of the eve of Innocent's Day, (December 28.) At the Cathedral of Sarum, it appears that the Boy Bishop held a kind of visitation, and maintained a corresponding state and prerogative, and he is supposed to have had power to dispose of prebends that fell vacant during his Episcopacy. If he died within the month, he was buried like other Bishops, in his episcopal ornaments: his obsequies were solemnized with much pomp, and a monument was erected to his memory, with his episcopal effigy. About 150 years ago, a Boy Bishop's monument, in stone, was discovered in Salisbury cathedral. Not only, however, does this ceremony seem to have existed in cathedrals, but in almost every parish. A statute of the collegiate church of St. Mary Offery, (London,) in 1337, restrains one of them from going in procession beyond the limits of his own parish. On the seventh of December, 1229, the day following that of St. Nicholas, the Boy Bishop, in the chapel at Heton, near Newcastle upon Tyne, said vespers before Edward I., then on his way to Scotland, who made him a considerable present, as well as the boys who sang with him. In the reign of Edward III. he received a present of nineteen shillings and six pence, for singing

before the king, in his private chamber, on Innocent's Day. Dean Colet, in the statutes of the school founded by him in 1512, at St. Paul's, expressly orders, that his scholars shall, every Childermass (Innocent's) day, "come to Paulis Church and hear the Chylde-Bishop's sermon; and after be at the hygh masse, and each of them offer a penny to the Chylde-Bishop, and with them the maisters and surveyors of the scole." Warton affirms that the practice of electing a Boy Bishop subsisted in common grammar schools: for St. Nicholas, as the patron of scholars, has a double feast at Eton College, where, in the papal times, the scholars, (to avoid interfering, as it would seem, with the Boy Bishop of the college on St. Nicholas's day,) elected *their* Boy Bishop on St. Hugh's day, in the month of November. Brand, indeed, is of opinion that the anniversary *montem* at Eton is merely a corruption of the Boy Bishop and his companions; the scholars, by an edict of Henry 8th, being prevented from continuing that ceremony, gave a new face to their festivity, and began their present pastime at soldiers, and electing a captain. Even within the memory of persons alive when Brand wrote, (1777,) the *montem* was kept a little before Christmas, although now held on Whit Tuesday.

According to Scandinavian mythology, the supreme God Odin, or Woden, assumes the name of *Nicker*, *Nikar*, or *Hnickar*, when he acts as the destructive or evil principle; (hence our own term, *Old Nick*, as applied to the evil one.) In this character he inhabits the lakes and rivers of Scandinavia, where he raises sudden storms and tempests, and leads mankind into destruction. In short, he is the northern Neptune, or some subordinate sea god of noxious disposition. Nikar, with the Scandinavians, being an object of dread, propitiatory worship was offered to him; and hence it has been imagined, that the Scandinavian Nikar became, in the middle ages, St. Nicholas, the patron of sailors, whose aid is invoked in storms and tempests—a supposition which receives countenance from the great devotion still felt by the Gothic nations towards St. Nicholas. To this Saint many churches on the sea shore are dedicated, and many a prayer to St. Nicholas is still offered by the seaman passing by. To these churches, in many countries, the sailors resort, who have suffered shipwreck, to return thanks for their preservation, and to hang up votive tablets, representing the danger they have escaped, in gratitude to the Saint for the protection he vouchsafed them, and in fulfilment of the vows they made in the height of the storm. This custom, which is more especially in use in the Catholic world, is probably taken immediately from the Romans, who had it, amongst a number of superstitions, from the Greeks: for we are told, that Bion, the philosopher, was shown several of these vo-

tive pictures hung up in a temple of Neptune near the seaside. Horace refers to the custom:—

“ Me tabulâ sacer
Votivâ paries indicat uvida
Suspendisse potenti
Vestimenta maris Deo.”—*Carm.* 1. 6.

“ While I, now safe on shore,
Will consecrate the pictur'd storm,
And all my grateful vows perform
To Neptune's saving power.”—*Francis.*

St. Nicholas was also the patron of the Parish Clerks of London, a set of worthies at one time of much higher importance than they are at present, from uniting with their proper avocations, the performance of *Mysteries*.^{*} They were incorporated into a guild, or fellowship, by King Henry III., about 1240; and, for some reason unknown to us, acknowledged the patronage of St. Nicholas.

About *St. Thomas's Day*, (December 21st,) the musical festivities of Christmas time usually begin in most Christian countries—especially that sort of nocturnal street music, commonly called *waits*, or *wakes*, which continue in many parts of England till Christmas. The pious songs of this period, usually termed *Christmas Carols*, are of very high antiquity. Bishop Taylor remarks, that the *Gloria in excelsis*, sung by the angels to the shepherds, at our Saviour's nativity, was the earliest. They have become, within the last century, much less common in England; but formerly, on Christmas Day, they took the place of psalms in all the churches, especially at afternoon service, the whole congregation joining; and, at the end, it was usual for the clerk to declare in a loud voice, his wishes for a merry Christmas and a happy New Year. Mr. Hone asserts, that, in Scotland, where no church feasts have been kept, since the days of John Knox, the custom of carolling is unknown; but in this he is not entirely accurate. The *Carralles*, it is true, were prohibited by Act of Parliament, as well as the *Gysars*, (a term applied to those who disguised themselves about this period,) but, until the present day, in Perthshire, the last night of the year is called *Carol-ewyn*, because young people go from door to door singing *carols*, in return for which service, they receive small cakes baked for the occasion.

In Wales, the custom is still retained to a greater extent than in England; and, at a former period, the Welsh had carols adapt-

^{*} *Clerkenwell*, history informs us, is so called, from the spring there situated, round which the Parish Clerks of London, in olden time, commonly performed sacred plays, or mysteries. This custom caused the spring to be denominated *Clerk's Well*, which became subsequently converted into *Clerkenwell*, now a populous parish in London.

ed to most of the ecclesiastical festivals, and the four seasons of the year, but they are now limited to that of Christmas. On the European continent, the custom is almost universal.

The ceremonies which take place in some countries, on the *Vigil of the Nativity*, in other words on *Christmas Eve*, (December 24th,) and which were formerly general, are, as Dr. Forster has remarked, of the most pleasing character, and serve to amuse in the dreary season of Mid-winter.* The houses and churches bedecked with evergreens, and their beautiful berries—the merry carols sung about the villages—the waits, or night music, and the cheerful bells which commence their peal at midnight, are naturally calculated to elevate joyously the imagination—an effect not a little enhanced by the numerous early recollections of childhood, with which Christmas and its festivities are, in the minds of most, connected.

The vulgar have a great many ridiculous notions with regard to Christmas Eve; and, on this night, observe a number of superstitious ceremonies. It is extensively believed, “frae Maiden-kirk to Johnny Groat’s,” that if we were to go into a cow-house at twelve o’clock at night, all the cattle would be found kneeling. Many also firmly believe that bees sing in their hives on Christmas Eve, to welcome the approaching day.

On this evening, women will not venture to leave any flax or yarn on their wheels, apprehending that the evil one would assuredly reel it for them before morning. Women, in a single state, assign another reason for this custom—their rocks would otherwise follow them to church on their marriage day. If any flax be left on the rock, they *salt*† it, in order to preserve it from Satanic power, and if yarn be accidentally left on a reel, it must not be taken off in the usual way, but be cut off. The same caution is exercised on Good Friday, but a reason is given for this, different from both of those that have already been mentioned:—on this day, it is said, a rope could not be found to bind our Saviour to the Cross, and the yarn was taken off a woman’s wheel for this purpose.

Of all the periods of the Calendar, none can compare, as regards the variety of miscellaneous customs, rites, and antiquities, with Christmas or Yule—the glorious time of commemoration to the Christian world for the birth of a Saviour—originally, however,

* *Christmas Eve* was by the Anglo-Saxons denominated *Myd-wyntres maesse-dæg*—Christmas itself being called *Mid-winter*, and *Mid-wyntres maesse-dæg*, as they gave the name of Midsummer to St. John’s Day.

† A particular sanctity has, by many nations, been believed to be lodged in salt, hence the expression *Σως αλς*, *divine salt*, by Homer; and *ἁγία αλς*, *holy salt*, by others.

the Gothic Pagan feast of *Yule* or *Jul*, celebrated in honour of the sun at the winter solstice.*

This festival, amongst northern nations, was the great season of sacrifice: amongst the Danes, even human victims seem to have been offered to their spurious Deities. The Goths used to sacrifice a Boar, for this animal (like the horse amongst the Persians) was, according to their mythology, sacred to the sun. To this day it is customary among the peasants of the north of Europe, at the time of Christmas, to make bread in the form of a boar pig. This they place upon a table with bacon and other dishes, and, as a good omen, expose it as long as the feast continues. For to leave it uncovered is reckoned a bad presage, and totally incongruous with the manners of their ancestors—this bread is called *Jula-galt*. The use that is made in Scotland of the *Maiden* or last handful of corn that has been cut down in harvest, has an analogy to this custom. It is divided amongst the horses or cows on Christmas morning, and sometimes on that of the New Year, “to make them thrive all the year round.” Anciently, the boar’s head soused, with a lemon in its mouth, was the first dish brought on table on Christmas day, in England, and was carried up with great state and solemnity. For this indispensable ceremony there was a Carol, which is given by Wynkyn de Worde as it was sung in his time, and as, according to Warton, with some alterations, it is still sung in Queen’s College, Oxford.

“*A carol bryngyng in the Bore’s Head,*

“*Caput apri defero*
Reddens laudes Domino.

“The Bore’s Heade in hande bring I,
With garlandes gay and rosemary,
I pray you all synge merely,
Qui estis in convivio.

“The Bore’s Head, I understande,
Is the chefe service in this lande:
Loke where ever it be fande
Servite cum Cantico.

“Be gladde, Lordes, both more and lasse,
For this hath ordayned our stewarde
To chere you all this Christmasse
The Bore’s Head with mustarde.

“*Caput apri defero*
Reddens laudes Domino.”

In some parts of Scotland, he who first opens the door on Yule day, expects to prosper more than any other member of the family during the future year, because, as the vulgar express it,

* Su. G. *jul*. Dan. *jule*, *juledag*. Isl. *jol*. A. S. *geola*, &c.

The Greenlanders, to the present day, keep a *Sunfeast* about the 22d of Dec. to rejoice at the return of the sun and the expected renewal of the hunting season. Crantz’s Hist. of Greenland, i. 176.

"he lets in Yule." The door being opened, it is customary with some to place a table or chair in the door way, covering it with a clean cloth; and, according to their own language, to "set on it bread and cheese to Yule." Early in the morning, as soon as any one of the family gets out of bed, a new besom is set behind the outer door—the design being "to let in Yule,"—superstitions which are clearly of heathen origin—Yule being not only personified but treated as a Deity, and receiving an offering. It is also common to have a table covered in the house from morning until evening, with bread and drink upon it, that every one who calls may take a portion, and it is deemed especially ominous, if any one comes into a house and leaves it without participation. Whatever number of persons may call on this day, all must partake of the good cheer. A similar superstition prevails on this subject in the north of England; but on New Year's day,—it is that of the *first foot*—the name applied to the person who first enters a house in the New Year; this is regarded by the superstitious and credulous as influencing the fate of the family, especially of the fair portion of it, for the remainder of the year. "To exclude all suspected or unlucky persons, it is customary for one of the damsels to engage beforehand some favoured youth, who, elated with so signal a mark of female distinction, gladly comes *early* in the morning, and never empty handed." (Brockett, p. 72.)

The following ridiculous rite, similar to one we have referred to, under the first of January, also holds in Scotland. Any servant who is supposed to have a due regard to the interests of the family, and is not at the same time emancipated from the yoke of superstition, is careful to go early to the well, on Christmas morning, to draw water, pull corn out of the stack, and also to bring *kale* from the kitchen garden. This is meant to insure prosperity to the family.

On this day too, as well as on New Year's day, Handsel Monday, (the first Monday of the New Year, when it is customary, especially in the north of England, to make children and servants a present as a Handsel) and Rood day, superstitious people in Scotland, will not allow a coal to be carried out of their own houses to that of a neighbour, lest it should be employed for the purposes of witchcraft; and the ancient Romans had a similar superstition.

The custom of saluting the apple trees at Christmas, with a view to their produce another year, yet exists in the west of England. In some places, the parishioners walk in procession, visiting the principal orchards in the parish. In each orchard one tree is selected as the representative of the rest; this is saluted with a certain form of words, having in them the air of incantation. They then either sprinkle the tree with cyder, or dash a bowl of cyder against it, to ensure its bearing plentifully the ensuing year.

One of the most remarkable of the events at Christmas, is its feasting. "The plum puddings, minced pies, and a thousand made dishes of exquisite sorts, such as people in common have but once a year, used to be, and still are, in some places, brought on the jovial board of hospitality. The Christmas dinner usually took place after mass and before vespers; and afterwards in the evening the wassail bowl.* Christmas Carols and merry songs, with various pastimes, jokes, Christmas games, and drolleries, made up the evening's entertainment, which was heightened by the merry ringing of the bells, and the mixture of music played both in the streets and the houses." (Forster, p. 732.)

We have already remarked that Yule was celebrated as a feast by the ancient Goths. It was also customary, especially in Sweden, for different families to meet together in one village, and to bring meat and drink with them, for the celebration of the feast; the same custom was observed when there was a general concourse to the place where one of their temples stood; and this was probably the origin of the custom, still maintained among us, of relations and friends feasting at each other's houses at this time. The festivities of Christmas have, however, passed their zenith; year after year witnesseth their decadency, and the being of the present day can form but an imperfect idea of the substantial entertainments of his ancestors, when, amongst other things,

"They served up salmon, venison and wild boars
By hundreds, and by dozens and by scores :
Hogsheads of honey, kilderkins of mustard,
Muttons and fatted beeves and bacon swine ;
Herons and bitterns, peacock, swan and bustard,
Teal, mallard, pigeons, widgeons and in fine
Plum puddings, pancakes, apple pies, and custard :
And therewithal they drank good Gascon wine,
With mead and ale, and cyder of our own,
For porter, punch and negus were not known."

The Gifts now generally conferred at the New Year, seem originally to have belonged to Christmas. In London, and in many other parts of England and of Europe, the custom of giving Christmas Boxes or Presents, although on the decline, is still a serious tax on large families and establishments. In some places,

* Our custom of drinking healths, and the *Wassail bowl*, appear to have originated, immediately, in the Introduction of the British Monarch Vortigern to Rowena—the beautiful blue-eyed daughter, or, according to other writers, Niece of the Saxon Hengist. She kneeled down, and, presenting to the king a cup of spiced wine, said, "Lord King, *waes heil*, health to you : to which Vortigern, instructed by his interpreter, replied, *drinc heil*, I drink your health, and then, as Robert of Gloucester says,

"Kuste hire and sitte hire adoune and glad dronk hire heil,
And that was tho' in this land the verst was-hail."

Was hail afterwards, not unnaturally, became the name of the drinking cups of the Anglo-Saxons.

it is now confined almost wholly to children. In London, Parish Boys and Children at School still carry about their samples of writing, and ask for their Christmas Box; and the Bellman, Watchmen, Waits, Bell-ringers, Postmen, &c. all over the country, repeat their annual calls on the liberality of their patrons. Of the antiquity of such gifts, we have already spoken, in an early number of this Review; we shall therefore merely quote on this subject a few of the remarks of Dr. Jamieson.

"The Romans, at this season, were wont to send presents of sweetmeats, such as dried figs, honey, &c., to which they gave the name of *Strenæ*. This was meant as a good omen; and by this substantial emblem, they also expressed their wishes, that their friends might enjoy the *sweets* of the year on which they entered: Rosin. Antiq. p. 29. 250. The custom which prevails in Scotland of presenting what the vulgar call a *sweetie-skoon*, or a loaf enriched with raisins, currants, and spiceries, has an evident analogy to this. In some of the northern counties of Scotland, the vulgar would reckon it a bad omen to enter a neighbour's house on New Year's day empty handed. It is common to carry some trifling present; as a bit of bread, a little meal, or a piece of money. Those gifts were also called by the Romans *Saturnalia*. Rosin. p. 294. *Saturnalia*, says Tertullian, *strenæ captandæ, et septimontium, et brumæ, et caræ cognationis honoraria exigenda omnia, &c.* De Idololatria, c. 10. V. also his work, De Fuga in Persecutione, c. 13. Tertullian severely reprehends the Christians for their compliance with the heathen, in paying some respect to these customs. "By us," he says, "who are strangers to Sabbaths, and new moons, once acceptable to God, the *Saturnalia* and the feasts of January, and *Brumalia* and *Matronalia* are frequented; gifts are sent hither and thither, there is the noise of the *Strenæ* and of games and of feasting. O! better faith of the nations in their own religion which adopts no solemnity of the Christians." De Idololatria, c. 14. We accordingly find that the *Strenæ* were prohibited by the Christian Church. V. Rosin. Antiq. p. 29. The *Strenæ* are traced as far back as to King Tatius, who, at this season, used to receive branches of a *happy* or fortunate tree from the grove of *Strenia*, as favourable omens with respect to the New Year. 2. Symmach. ap. Rosin. p. 28. It appears that in consequence of the establishment of the monarchy under Augustus, all orders of people were expected to present New Year's gifts to the Emperor themselves. Sueton. in August. c. 57. During the reign of this prince, these were given at the Capitol. But Caligula was so lost to a sense of shame, as to publish an edict expressly requiring such gifts; and to stand in the porch of the palace, on the Calends of January, in order to receive those which people of all descriptions brought to him; Sueton. in Calig. c. 42. Even Augustus pretended to have a nocturnal vision, requiring that the people should annually, on a certain day, present money to him, which he received with a *hollow-hand*, *cavam manum asses porrigentibus præbens*; Id. in August. c. 91. It was reckoned a handsome enough way of receiving gifts, when the bosom fold of the cloak was expanded. But when they were received *utraq; manu cavata*, as it would be expressed in Scotland, in *goupins*, it was accounted a species of depredation. Hence *rapine* was proverbially expressed in this manner. V. Ammian. Marcellin. lib. 16. Rosin. Antiq. p. 29. The *Strenæ* were considered of such importance, that a particular deity was supposed to preside over them, called *Dea Strenia*: Rosin. p. 28. This might be the principal reason why they were condemned by Christians in early times. To have any concern with them, might be reckoned a symbolizing in some sort with idolatry."—*Etymological Dictionary*, Art. *Yule*.

The *Saturnalia* amongst the Romans, at length, lasted seven days; the *Sigillaria*, (feasts also in honour of Saturn, and formerly celebrated after the *Saturnalia*, at which little statues of silver were offered to the God,) being included. During this sea-

son of festivity and dissipation, all public business was suspended: the senate and courts of justice were shut up: and all schools had a vacation—circumstances strikingly resembling our Christmas holidays. Master and servant sate at one table. Every thing serious was laid aside, and people of all ranks gave themselves up to jollity, (which word, indeed, as well as the French *joli*, Wachter considers to come from *jol*, yule.)

Candles of a particular kind are in some places made for this season: for the candle that is lighted on Christmas Day, must be so large as to burn from the time of its being lighted till the day be done, otherwise it would be a bad omen to the family for the subsequent year. There is no reason to doubt that this custom has been transmitted from the times of heathenism. In the Roman *Saturnalia*, lights were used in the worship of their Deity, and hence originated the custom of making presents of this kind. The poor were wont to present the rich with wax tapers, and *Yule candles* are still, in the north of Scotland, given as presents by merchants to their stated customers. By many who rigidly observe the superstitions of this season, the *Yule candle* is allowed to burn out of itself, by others it is extinguished, and the remnant kept for *luck*.

There are other miscellaneous superstitions, in relation to this period, of which we shall relate but two or three. In the morning, one individual rises before the rest of the family, and prepares food for them, which must be eaten in bed. This frequently consists of cakes baked with eggs, called *Care cakes*. A Bannock, or cake, is baked for all in the house, and if any one of these should break in the toasting, the person for whom it is baked will not, it is supposed, see another Christmas: a part of this custom is evidently of Catholic origin—being the remnant of that of baking cakes in honour of the delivery of the Virgin Mary.

Women seem, in some places, to have a peculiar aversion to spinning on this day—a superstition which savours strongly of Paganism. Ovid affirms that Bacchus punished Alcithoe and her sisters for presuming to spin during his festival. There is a singular passage in Jhone Hamilton's *Facile Traictise*, quoted by Jamieson, which, whilst it affords a proof of the traditionary antipathy to *spinning* on *Yule Day*, also shows how jealous the Scotch Reformers were against the observance of all festival days. After declaring the opposition of the *Caluinian sect* to all *haly-days* except *Sunday*, he says—

“The ministers of Scotland—in contempt of the vther halie dayes obseruit be England,—cause thair wyfis and seruants *spin* in oppin sicht of the people upon *Yeul* day; and thair affectionat auditeurs constraines thair tennants to yok thair pleuchs on *Yeul* day in contempt of Christ's Natiuitie, whilk our Lord hes not left vnpunisit: for thair oxin ran wod and brak thair nekis, and leamit sum pleugh men, as is notoriously knawin in sindrie partes of Scotland.”

The *Christmas Log*, or *Yule* or *Yull Clog*, is another superstition of the period : this is a large block, or log of wood, laid on the fire on Christmas Eve, and, if possible, kept burning all the following day, or longer. A portion of the old clog of the preceding year, is sometimes saved to light up the new block at the next Christmas, and to preserve the family from harm, in the meanwhile : during the time, too, that this log lasts, the servants in farm houses are entitled, by custom, to ale at their meals.

Of the various sports, games, and pastimes, of this season of hilarity, such as the *Lord or Abbot of Misrule*, or *Abbot of Un-ressoun*—*Hot Cockles*—*Hunt the Slipper*—*Guisers*, or *Gysars*—*He can do little that can't do this*, &c. it might be entertaining to give some etymology, but our already overstrained limits will not admit of this. It has ever been a great period for gaming in most countries—even the ancient Romans, by whom games of chance were prohibited, provided an exception for the month of December.

For some unexplained cause, *St. Stephen's Day*, (December 26,) was a great period with our ancestors for bleeding their horses—a practice followed by people of all ranks, and recommended by Tusser in his *Husbandry*. The custom is thus referred to by Barnaby Googe.

“Then followeth Saint Stephen's day, whereon doth every man
His Horses jaunt and course abroad, as swiftly as he can,
Until they doe extreemely sweate, and then they let them blood,
For this being done upon this day, they say doth do them good,
And keepes them from all maladies and sicknesse through the yeare,
As if that Stephen any time tooke charge of Horses here.”

According to Mr. Dance, this is a very ancient practice, and was introduced into Britain by the Danes. Mr. Nicholls has also quoted money paid “for letting oure horses blede on Christmasse weke.”

The *Holy Innocents*, or *Childermass Day*, (December 28,) commemorates the slaughter of the Jewish children by Herod, and it is recorded by Macrobius, (*Saturnal. cap. iv.*) that the savage order was so promptly executed, that one of the sons of the tyrant, then at nurse, fell a sacrifice with the other children.*

“It hath,” saith the learned Gregorie, “been a custom, and yet is elsewhere, to whip up the children upon Innocents' Day morning, that the memorie of this murther might stick the closer; and, in a moderate proportion, to act over the cruelty again in kind.” A custom referred to by Hospinian—“*hujus lanienæ truculentissimæ ut pueri Christianorum recordentur et simul dis-*

* Macrobius relates, as one of the jokes of Augustus, that when he heard of this circumstance, he exclaimed, “*Melius est Herodis porcum esse quam filium.*”

cant odium, persecutionem, crucem, exilium, egestatemque statim cum nato Christo incipere, virgis cædi solent in aurora hujus Diei adhuc in lectulis jacentes à parentibus suis." This was formerly a day of unlucky omen, and an apprehension is still entertained by the superstitious, that no undertaking can prosper which is begun on that day of the week on which Childermass last fell.

Lastly—New Year's Eve—or as it is termed by the vulgar in Scotland, and in the north of England, *Hogmanay*, or *Hogmenay*.* This term is also transferred to the entertainment given to a visiter on this day, or to a gift conferred on those who apply for it, according to ancient custom.

"The cotter weanies, glad an' gay
Wi pocks out oure their shouter,
Sing at the doors for *Hogmanay*."

Dr. Jamieson has given us an interesting extract regarding this ceremony, from a fugitive piece in the Caledonian Mercury for 1792.

"The cry of *Hogmanay Trololay*, is of usage immemorial in this country. It is well known that the ancient Druids went into the woods with great solemnity on the last night of the year, where they cut the mistletoe of the oak with a golden bill, and brought it into the towns, and country houses of the great, next morning, when it was distributed among the people, who wore it as an amulet to preserve them from all harms, and particularly from the danger of battle. When Christianity was introduced among the barbarous Celtae and Gauls, it is probable that the clergy, when they could not completely abolish the Pagan rites, would endeavour to give them a Christian turn. We have abundant instances of this in the ceremonies of the Romish Church. Accordingly this seems to have been done in the present instance, for about the middle of the 16th century, many complaints were made to the Gallic Synods, of great excesses which were committed on the last night of the year, and on the first of January, during the *Fête de Fous*, by companies of both sexes, dressed in fantastic habits, who ran about with their Christmas Boxes, called *Tire Lire*, begging for the Lady in the Straw, both money and wassels. These beggars were called *Bachelettes*, *Guisards*; and their chief *Rollet Follet*. They came into the churches, during the services of the vigils, and disturbed the devotions by their cries of *Au gui menez, Rollet Follet, Au gui menez, tiri liri, mainte du blanc et point du bis*. Thiers, Hist. des Fêtes et des Jeux. At last, in 1598, at the representation of the Bishop of Augres, a stop was put to their coming into the churches: but they became more licentious, running about the country, and frightening the people in their houses, so that the legislature was obliged to put a final stop to the *Fête de Fous* in 1668. The resemblance of the above cry, to our *Hogmenay, Trololay, Give us your white bread and none of your grey*; and the name *Guisards*, given to our Bacchanals, are remarkable circumstances; and our former connexions with France, render it not improbable that these festivities were taken from thence, and this seems to be confirmed by our name of *Daft Days*, which is nearly a translation of *Fêtes de Fous*. It deserves also to be noticed, that the Bishop of Augres says, that the cry, *Au gui menez, Rollet Follet*, was derived from the ancient Druids, who went out to cut the *Gui* or mistletoe, shooting and hollaing all the way, and on bringing it from

* In Northumberland, the month of December is called *Hogmana*, which Lambe derives from the Greek $\alpha\gamma\iota\alpha \mu\omega\nu$ —the holy moon, but this is doubtful. Others maintain it to be merely a corruption from the French "*homme est né*"—man is born—in allusion to the Nativity!

the woods, the cry of old was, *Au Gui Pan neuf, le Roi vient*. Now although we must not suppose that the Druids spoke French, we may easily allow that cry to have been changed with the language, whilst the custom was continued. If the word *Gui* should be Celtic or Scandinavian, it would add force to the above conjecture.* Perhaps, too, the word *Rollet* is a corruption of the ancient Norman invocation of their hero *Rollo*.—Etymological Dictionary, Art. *Hogmanay*.

In confirmation of this, it may be remarked, that, in many parts of France, it is customary for young people, on the last day of December, to go about the towns and villages, singing and begging money, as a kind of New-Year's gift, and crying out "*Au Guy! L'an neuf!* To the misletoe! the New-Year is at hand! and, lastly, in England, it is still a common custom amongst the vulgar, to hang up a branch of misletoe on Christmas day, under which the young men salute their sweethearts. This is evidently a relic of Druidism, as well as the custom already referred to, of adorning the churches with it; and both may be viewed as a traditionary vestige of its consecration, in the worship of the ancient Britons.

The above catalogue has extended to so unexpected a length, as to leave us but little space for comment. One circumstance must have struck every one, in its perusal—the intimate connexion between the customs of nations remote from each other, and indicative of their common origin. In tracing nations to their particular sources, the chief reliance has generally been placed upon etymology; but a close investigation of customs is of no less importance: in every such historical investigation, indeed, they ought to go hand in hand. We have seen that most of our rites and superstitions are of Gothic origin: whilst others are as clearly Druidical, or Celtic; and both resemble those of the East, and especially of Persia. This is readily accounted for. Both Celts and Goths were originally Oriental. The Celts, having emigrated at a much earlier period than the Goths, had probably fewer ceremonies; hence the paucity amongst us, of Celtic superstitions.

The Religion of the Nomadic Goths, was also, at first, we have but little doubt, comparatively simple: the great change in that of the Scandinavians, being wrought by the arrival of Odin, who introduced amongst them the splendid mythology of the East, and subsequently received his own apotheosis. Other observances have reached us, through a Grecian or Roman chan-

* The word *Gui* seems to us to be of Celtic origin. The Mistletoe was a sacred plant with the Druids, and hence, we have no doubt, was considered the plant *par excellence*. In all the dialects of the Celtic, the word *Gui*, in some form or other, signifies Trees. In the Celtic, *Guez* signifies trees—*Guezecq* and *Guezennecq*—a place abounding in trees. In the Armoric, or Bas Breton—*Guezen* is a tree—*gues*—trees—*Guezennic*—shrubs—whilst in the Welsh—*Guid* is a tree, and *Guid-hele* bushes, brambles, &c. from which the misletoe was termed *Gui*, as Parson was derived from *Persona*—the Person.

nel, but these again bear striking evidence of an Oriental origin. The mythology of Greece, is unquestionably Oriental; and the Romans derived theirs from the Greeks. Hence many of our superstitions, nursery tales, &c. may have descended to us by various streams—originally, along with our Celtic or Gothic ancestry, and subsequently by the route of more modern conquest—most, however, unequivocally exhibiting the like Oriental parentage.

Lastly, the wide extent of superstition amongst us—superstition too, in many cases, of the most idolatrous character, affords a humiliating subject of reflection; and it is a striking proof of the tyrannical influence of custom on the mind, that many, who have no faith in these observances, could not feel comfortable, were they to neglect them. We recollect a Naval officer, high in rank, smiling at the superstitions of the profession, and especially at the almost universal belief, that whistling on deck is capable of raising the wind, yet declaring, in the same breath, that he should not feel at ease, were any one on deck to whistle in tempestuous weather—a better instance we could not give of the power of superstition:—

" 'Tis a history
Handed from ages down; a nurse's tale
Which children open ey'd and mouth'd devour,
And thus as garrulous ignorance relates,
We learn it and believe."

ART. VII.—*The Life of Elbridge Gerry, with contemporary Letters, to the Close of the American Revolution.* By JAMES T. AUSTIN. Boston: 1828.

IN reviewing the "Biography of the Signers to the Declaration of Independence," in our second number, we intended to specify the principal merits of each of those fortunate patriots; but, from some casualty, the name of *Elbridge Gerry* was alone omitted, in the execution of our purpose. As every American who has examined the revolutionary annals of his country, must entertain a deep respect and gratitude for the part which Gerry took in promoting the cause of independence, we were anxious, after the omission was remarked, to repair it at the first opportunity; and we therefore awaited with particular interest, the Life which has at length been issued by one of his near relatives. In opening the volume, however, we suffered a disappointment that will be common to all who expected a complete biographical sketch. It is labelled *The Life of Gerry*, and car-

ries the same promise in the title-page ; but the inquirer at once discovers, from the table of contents and the preface, that his career is traced only down to the end of the Revolution.

Mr. Austin states the considerations, by which he was induced to stop short, or pause, at the middle of his enterprise. They do not strike us, we must confess, as sufficient. The present generation of Americans are more familiar with the annals of the Revolution, than with the public history of the interval between that era, and the death of Mr. Gerry ;—and it is the authentic development of his conduct and character, in connexion with the party-disputes, which would be almost universally deemed most important and curious, and have specially recommended the whole subject of his life to the attention or study of the present age. Just in proportion as he was held a party-leader, and defamed and misunderstood in that respect, was it material,—if his proceedings and dispositions could be vindicated, or set in a favourable light—to exhibit his entire course at once, leaving no scope for the suspicion, that some fear or mysterious reluctance was felt about showing more than the revolutionary man. As the biography now rests, an inveterate federalist of the old school, might suggest the image of Horace's mermaid, and hint that it was well not to uncover the lower extremities. For ourselves, we shall candidly say, that, in the number of leaders or prominent personages in the momentous party contests of the interval mentioned above, Mr. Gerry is almost the only one, of whose merits or demerits we have not been able to form a positive opinion : and we lament still more the continuance of this difficulty, since we have read this narrative of the anterior portion of his existence ; for it certainly has inspired us with a high idea of his revolutionary spirit and services, and does prove, as his biographer suggests, “the validity of his title to those large honours which his country bestowed upon him.” However, a hope is left, that the residue of the life will be given from the same sources, as, in the Preface, it is said to be in progress, though no positive promise of its publication be made.

ELBRIDGE GERRY was born at Marblehead, in the state of Massachusetts, on the 17th of July 1744. His father was a reputable merchant, who gave the son a liberal education in the common schools and at Harvard College ; and at first destined him to the profession of medicine, but finally engaged him in his own pursuits of trade. Elbridge was in every respect successful as a merchant ; while his superior education, his active talents, and his unexceptionable conduct, rendered him important and popular with the honest, acute, and intrepid fishermen of Marblehead. In the controversy between Great Britain and the colonies, they took an early, patriotic interest ; and elected him, in 1772, their representative in the general court, or legislature,

of Massachusetts. From this period, he continued to be a public and a leading man, almost without intermission. His spirit resembled and sustained that of his townsmen; and it was nourished by close communion with the Adamses, the Hancocks, and the Warrens. When together, at Boston, these master-patriots concerted with him, in their private meetings, resistance to the tyrannical projects of the mother country, and pursued it jointly in the exercise of their public duty; and, when separated, even at a short distance, they constantly wrote to each other, with the same temper and object. A part of this correspondence, of the year 1772, is quoted by Mr. Austin. Gerry appears to much advantage in it, as a resolute, long-sighted, indefatigable adviser. In 1773, he was re-elected a member of the General Court, where, though one of the youngest of the assembly, he was placed on the most important committees of correspondence, and distinguished himself in the principal debates. Several of his letters of the year 1774, are introduced into the Life, which denote equal determination and sagacity. He said in one, what, we trust, will be fully verified—"The special resentment of an arbitrary ministry, will prove for the metropolis a diadem of honour, and render the name of Boston respected and revered to the latest posterity." He could not fail to be a member of the famous Convention at *Concord*, a provincial congress of Massachusetts, which at once virtually destroyed the royal authority in that province, and set, to all the others, an unequivocal example of revolt. Mr. Austin argues, that the earlier organization of the first Continental Congress, which met on the fourth of the preceding month, cannot be considered as having anticipated the designs or credit of the Concord convention. Gerry was a substantive member of the Committees of Appeal and Safety: when the British commander threatened Marblehead, he entered into the militia; and, on the night immediately preceding the Battle of Lexington, he narrowly escaped capture, as one of a "rebel" committee of the Provincial Congress. After the sword was drawn, he was placed at the head of a committee charged with the endeavour to obtain necessary supplies for waging the contest. His biographer states, that, "besides his own personal exertions, which were unremitting and indefatigable, he did not hesitate, in many cases, to advance his own funds, where immediate payment was required, and to incur responsibilities on his own credit, which the province was then unable to redeem, and which, in fact, occasioned him, in the end, heavy pecuniary loss."

The letters which passed between Gerry and the Massachusetts members of the Continental Congress, in the year 1775, form, chiefly, the seventh chapter of this book, and possess peculiar interest. In one of June 4th, he observed to them—"I should

heartily rejoice to see this way, the beloved Colonel Washington, and do not doubt the New-England generals would acquiesce in showing to our sister colony, Virginia, the respect which she has before experienced from the continent, in making him generalissimo." The President of the Congress, (Hancock,) on the eighteenth of that month, wrote to him:—

"I cannot inform you of the doings of Congress in general, being under an injunction; but I am thus far indulged to mention, but by no means to be put in the newspaper at present, Colonel Washington is appointed commander in chief of the continental army: I shall sign his commission to-morrow, and he will depart in a few days. He is a *fine man*. You will judge of the propriety of the mode of his reception. Ten companies of riflemen from Pennsylvania, Maryland, and Virginia, are ordered to proceed immediately to your army; these are clever fellows."

There is a letter of the same date from John Adams, wherein the truly *fine man* is also mentioned, thus—

"There is something charming to me, in the conduct of Washington. A gentleman of one of the first fortunes upon the continent, leaving his delicious retirement, his family and friends, sacrificing his ease, and hazarding all in the cause of his country! His views are noble and disinterested. He declared, when he accepted the mighty trust, that he would lay before us an exact account of his expenses, and not accept a shilling for pay."

It is pleasing to learn thus, what impressions the character and conduct of Washington made at that epoch, upon the minds of the northern statesmen. The feelings of those with or near whom he acted, after he had passed somewhat more than two years in his chief command, are justly stated by General Knox, in the following terms, in a letter to Gerry.

"It is a matter of consequence, that those in the senate should be well acquainted with the sentiments that pervade the army and community at large. The prepossessions of the army in favour of the character hinted at, are founded upon a thorough experience of his ability, judgment, courage and attachment, and they would infinitely prefer him before a Turenne or a Condé. Every military character on this continent, taken collectively, vanishes before him; and he is not only a soldier, but a patriot in the fullest sense of the word; and as it is impossible truly to describe a living character, it must be left to posterity to do him ample justice."

As there is no name of equal lustre, in general, in all history, so there is no other of which the details are universally and brilliantly reputable. From his youth he excited more or less of admiration in every individual with whom he came into contact: Since his death, no act or trait has been revealed, which throws the least shade upon his fame.

Gerry first proposed in the Provincial Congress of Massachusetts, the appointment of a committee to prepare a law to encourage the fitting out of armed vessels, and to establish a court for the trial and condemnation of prizes; and as chairman of that committee, he contributed materially to the accomplishment of all its ends. Mr. Austin remarks, that the law which was reported, and passed on the 10th of November 1775, was the first ac-

tual avowal of offensive hostility against the mother country, and the first effort to establish an American naval armament. The late President Adams called it *Mr. Gerry's law*, describing it at the same time, as "one of the boldest, most dangerous, and most important measures, in the history of the new world." In a letter dated 1813, from the same patriot, to Mr. Gerry, we find the following curious passage.

"Philadelphia is now boasting that Paul Jones has asserted in his journal, that his hand hoisted the first American flag; and Captain Barry has asserted that the first British flag was struck to him. Now I assert that the first American flag was hoisted by John Manly, (of Massachusetts) and the first British flag was struck to him."

In November 1775, courts were established by the authority of the province of Massachusetts, and the lucrative post of maritime judge was offered to Mr. Gerry, but declined, lest it should obstruct the performance of his general political duties, to which he continued to devote himself with indefatigable zeal. At this period of the *Life*, a correspondence between him and Samuel Adams is introduced, much of which is characteristic, particularly of the latter politician. The annexed excerpts are passages of some of Adams's letters.

"Corrupt men may be kept out of places of public trust; the utmost circumspection I hope will be used in the choice of men for public officers. It is to be expected that some who are void of the least regard to the public, will put on the appearance and even speak boldly the language of patriots, with the sole purpose of gaining the confidence of the public, and securing the loaves and fishes for themselves or their sons or other connexions. Men who stand candidates for public posts, should be critically traced in their views and pretensions, and though we would despise mean and base suspicion, there is a degree of jealousy which is absolutely necessary in this degenerate state of mankind, and is indeed at all times to be considered as a political virtue." * * *

"After all, virtue is the surest means of securing the public liberty. I hope you will improve the golden opportunity of restoring the ancient purity of principles and manners in our country. Every thing that we do, or ought to esteem valuable, depends upon it. For freedom or slavery, says an admired writer, will prevail in a country according as the disposition and manners of the inhabitants render them fit for the one or the other." * * *

"Whatever kind of men may be denominated enemies to their country, certainly he is a very injudicious friend to it, who gives his suffrage for any man to fill a public office, merely because he is rich; and yet you tell me there are recent instances of this in our government. I confess it mortifies me greatly. The giving such a preference to riches is both dishonourable and dangerous to a government. It is indeed equally dangerous to promote a man to a place of public trust only because he wants bread, but I think it is not so dishonourable; for men may be influenced to the latter from the feelings of humanity, but the other argues a base, degenerate, servile temper of mind. I hope our country will never see the time, when either riches or the want of them, will be the leading considerations in the choice of public officers."

In the same chapter, the biographer has stated some interesting particulars of the routine and habits of the new councils.

"The members lived in the families of the inhabitants of Watertown, and held their daily sessions in the meeting house on the plain. The Congress opened early, and adjourned for an hour to give the members time to dine at one o'clock.

Two sessions were usually held every day, and committees were often engaged till midnight. The time which could be caught from such fatiguing duty without neglecting it, might well be devoted to rational diversion.

"A gentleman, who paid any attention to his toilet, would have his hair combed out, as is represented in our frontispiece, powdered and tied in a long queue, a plaited white stock, a shirt ruffled at the bosom and over the hands, and fastened at the wrist with gold sleeve buttons, a peach bloom coat and white buttons, lined with white silk, and standing off at the skirts with buckram, a figured silk vest divided at the bottom, so that the pockets extended on the thighs, black silk small clothes with large gold or silver knee buckles, white cotton or silk stockings, large shoes with short quarters and buckles to match. This dress, sketched from the wardrobe of a member, was not peculiarly appropriate to occasions of ceremony, but assumed with more or less exactness by the fashionable gentlemen of the day.

"The full bottomed wig, the red roquelot, and the gold headed cane, which are seen in some of our ancient pictures, belonged to an earlier period, and were at that time the appropriate habiliments of persons distinguished for their age and wealth."

"At the period referred to, great deference was paid to years, more to family, and not less to fortune. Ancient habits could not at once be changed, and the forms of a society, which had been regulated by provincial imitation of English manners, continued to prevail. It was the effect of the revolution to break down these artificial distinctions, and to show that a man's influence should not be in proportion to family or wealth, but to the character of his mind and the motives of his conduct."

In the beginning of the year 1776, Mr. Gerry was elected a delegate from Massachusetts to the Continental Congress, in which he took his seat without delay. As a member of that body, he became scarcely less useful and conspicuous than he had been in the assembly of his native province. The reputation which he carried with him, ushered him into all the committees of highest importance. He had a principal share in the regulation of the financial concerns of the confederation, which are well detailed by Mr. Austin. On the cardinal subject of a Declaration of Independence, his feelings and resolves may be understood by the subjoined passages of his letters from Philadelphia, to Warren and Hawley.

"You are desirous of knowing what capital measures are proposed in congress. I refer you to colonel Orne for what is done concerning privateering, and I hope soon that all your ports will be open and a free trade be allowed with all nations. This will not in itself satisfy you, and *I hope nothing will, short of a determination of America to hold her rank in the creation, and give law to herself.* I doubt not this will soon take place, and am sure New-England will not be satisfied with less, since not only the government but the people of Great Britain are corrupt and destitute of public virtue." * * *

"I think it may be demonstrated that the eastern district alone is able of itself to declare independency. The colony of South Carolina have behaved nobly in taking up government, choosing a governor, &c.; and the convention of North Carolina have unanimously voted to follow their example.

"Virginia is always to be depended upon; and so fine a spirit prevails among them, that unless you send some of your cool patriots among them, they may be for declaring independency before Congress is ready."

"In this colony (Pennsylvania) the spirit of the people is great, if a judgment is to be formed by appearances. They are well convinced of the injury their assembly has done to the continent by their instructions to their delegates. It was these instructions which induced the middle colonies and some of the southern

to backward every measure which had the appearance of independency ; to them is owing the delay of Congress in agitating questions of the greatest importance, which long ere now must have terminated in a separation from Great Britain : to them is owing the disadvantages we now experience for want of a full supply of every necessary for carrying on the war. Alliances might have been formed, and a diversion been given to the enemy's arms in Europe or the West Indies, had these instructions never appeared. But they have had their effect; and while we endeavour to recover the continent from the ill consequences of such feeble politics, we ought to show the cause of such miserable policy. It appears to me, that the eyes of every unbeliever, are now open ; that all are sensible of the perfidy of Great Britain, and are convinced there is no medium between unqualified submission and actual independency. The colonies are determined on the latter. A final declaration is approaching with great rapidity. May the all-wise Disposer of events so direct our affairs that they may terminate in the salvation of these afflicted colonies.

" Amidst all our difficulties you would be highly diverted to see the situation of our ' moderate gentlemen.' They have been more apprehensive of evils than any others, as we have frequently observed, and they have now the mortification to find that their measures for avoiding, have but served to increase them. I sometimes think that Providence permitted them to clog the affairs of the colonies, that they may become in some degree desperate, and thus introduce into the circle of determined men those timid beings, whose constitution never admits of their defending freedom on the noblest principles, and are afterwards obliged to meet danger by the same motives that induced them to shun it."

With regard to the part which he bore in the discussion, in Congress, of the measure of separation, we have this testimony from the late venerable President Adams.

" Yes, Mr. Gerry made several speeches, but one in particular, in which he laid out his whole soul. He did not rank as an orator with Richard Henry Lee, but he poured out his reasons with an energy and fervour that spoke the honest conviction of his mind. Yes, we felt obliged to him for his services in debate. There was an honesty and sincerity about him that was better than the thunder of Demosthenes."

It would be superfluous and oppressive to specify the various labours of the Massachusetts delegate in connexion with the committees. The circumstance of his having been deputed by Congress, several times, to confer with General Washington on the situation and wants of the army, has afforded an occasion for the insertion of an instructive correspondence on those heads, and respecting the military system of the commander. Mr. Austin fully refutes the assertion of Carlo Botta, that the delegates of Massachusetts were " far from approving the moderation of the general-in-chief." He seems to be warranted, too, in affirming the existence of abundant evidence that no feeling of hostility was entertained by Gerry to Washington, and that the illustrious leader " reposed with full security on his esteem, friendship, and unremitted support."

Mr. Gerry participated in the debates on the articles of confederation, and according to his biographer, contributed very much to their final adoption. From his first entrance into Congress, until the organization of the Treasury Board in 1780, he continued to be a member, and was generally chairman, of the

committee of the treasury. Mr. Austin represents the tasks which he performed as herculean, and adds, that "it would seem from the files of his papers, that every person in every part of the continent, who had any business with Congress, felt at liberty to address him, and nobody wrote him without the civility of a reply." When, in the spring of 1779, Congress undertook to arrange a commission for negotiating peace, the Massachusetts delegate brought forward a series of important propositions for the security of the northern fisheries. They were strongly and pertinaciously opposed by the Southern members, and as strenuously supported by the whole representation of New-England. In fifteen divisions of the house, on questions by ayes and noes, the majority adhered to the original propositions, and rejected every alteration that was moved; but a resolution was finally substituted and carried, declaring that the guarantee of a common right to the fisheries was *not* to be made an *ultimatum*. Although the immediate aim of Mr. Gerry could not be compassed, Mr. Austin expresses the opinion, that the facts which his motion drew forth, were not without a material effect when the treaty of peace was concluded. Towards the end of 1779, delegates were appointed by several states to meet at Philadelphia as a convention, for the purpose of devising some corrective of the sad condition of the currency. Mr. Gerry was at the head of the commission chosen by Massachusetts;—but the evil required other remedies than the system which the associated states had in view. In his capacity of presiding officer of the Treasury board, he rendered himself particularly invidious to General Arnold, whose extravagant accounts he rejected with a spirit which deserves to be admired, since Arnold was then, as Mr. Austin truly observes, "known only as a gallant soldier, whose skill and courage had been conspicuously exerted for his country, and the liberality with which such talents and activity were then readily rewarded, inclined men to a favourable consideration of his claims." To his abusive appeal to Congress, Mr. Gerry replied, first exhibiting calmly the reasons of his decision on his accounts, but concluding with a severe reprehension of the conduct of his assailant. "If," said he, "the faithful discharge of an official duty, unpleasant enough in itself, is to bring with it the liability of personal attack from men who have neither honesty in their public dealings nor courtesy in private life, it might be well to abolish all guards on the treasury, and admit rapacity and crime to help themselves at pleasure." This was intrepid language at the period, and must be sound doctrine at all times. Arnold quitted Philadelphia, defeated and incensed, for the theatre where he consummated the treason which he may be affirmed to have begun in endeavouring to defraud his country of a portion of those scanty means which she critically needed.

In February, 1780, a measure of Congress, with respect to the assessment of supplies from the several states, gave so much umbrage to Mr. Gerry, as the representative and guardian of Massachusetts in that body, that he left his seat, and repaired to his native province, where he remained for some time. We may abstain from any details on this head, and confine ourselves to the fact, that his course was approved and his expostulation repeated by the general assembly of Massachusetts. Though absent, he was selected by Congress as a member of one of their usual committees to visit the army. Yielding to the solicitations of personal and political friends, and satisfied at length with the measures which were adopted on the subject of his remonstrance, he resumed his station in the national councils, in 1783. When the definitive treaty was laid before them, in that year, those members who had signed the Declaration of Independence, of whom three only remained—Mr. Jefferson, Mr. Gerry, and Mr. Ellery of Rhode Island—were appointed first on the committee to which it was referred. The session of Congress terminated on the 3d June, 1784. To use the language of Mr. Austin,—“the journals of its proceedings testify to the diligence and labours of the delegate from Massachusetts. He manifested the assiduity of a man of real business. In whatever department work was to be performed, he was counted upon as one of the efficient agents by whom it was to be conducted. Scarcely a committee was raised in which he was not called upon to bear an efficient part.” The biographer relates, that Mr. Gerry concurred in all the opposition which the institution of the society of the Cincinnati excited. Moved by his zeal, in part, even the General Court of Massachusetts resolved, that “the society was unjustifiable, and if not properly discountenanced, might be dangerous to the peace, liberty, and safety of the United States in general, and of Massachusetts in particular.” The alarm seems to have been taken also by John as well as Samuel Adams. Knowing what the order of the Cincinnati have been and are, we may now smile at the original panic, but still it was founded in a jealousy too natural and opportune to be harshly condemned or treated with deliberate levity. Mr. Austin handles it in a sensible and liberal manner.

Mr. Gerry was re-elected a member of Congress, for 1784. It is mentioned, that, at an age, short of forty-two years, he was the *doyen* or eldest member of that assembly. At this epoch of his career, the biographer closes his volume. We are informed, in the penultimate page, that, about the same date, he married the daughter of Mr. James Thompson, a lady as distinguished by her beauty and personal worth, as by her family and social connexions. Touching his matrimonial project, there is a passage of one of the letters of his friend Dana, which we are

tempted to quote, in order to illustrate the high opinion which was entertained of his value in the political world :—

“There are many duties incumbent upon us in this life, perfectly consistent with each other ; but unless you can settle it in your own mind, that a proper attention to the woman of your choice will not require of you a renunciation of your political career, I must urge it upon you to remain as you are ; for without flattery, my friend, I know of no one in our state whose experience and abilities have better fitted him to assist in the deliberation and guidance of our great national concerns.”

By recurring to the Biography of the Signers to the Declaration of Independence, we learn—that Mr. Gerry was a conspicuous member of the Convention who framed our present Federal system ; that, as a representative in the first Congress, under the new order of things, he took a peculiar interest in all financial questions, and was listened to on such subjects, “with more confidence, perhaps, than any other debater ;” that, about this period, he was unsuccessful as a candidate for the office of governor of Massachusetts ; that he voluntarily retired from Congress, after four years of effective service ; that, unsolicited, President Adams selected him as the colleague of General Pinckney and Mr. Marshall, in that embassy to France, which may be styled an era in our political annals ; that, on his return from abroad, the “Republican party” in Massachusetts, failed in an attempt to elect him Chief Magistrate of the state ; that, in 1810, he was prevailed upon to allow his name to be placed on the Republican ticket for the same office, and was carried “by a most honourable and decisive majority ;”—that he was re-elected the second year, but lost his station, the following one, from the violence of party spirit ; that, having been recommended, in 1812, by a Republican caucus of members of Congress, held at Washington, to the people of the United States, as a proper person to fill the office of vice-president, he was elected to the office by a majority of forty-one electoral votes ; and that, from the period of the fourth of March 1813, when he was inaugurated, until his sudden death,—which took place at Washington, in November 1814, as he was on his way to the capitol,—he devoted himself unremittingly to the impartial discharge of his functions. Mr. Austin, in his preface, suggests that Mr. Gerry is believed to have been, “at the period when he presided in the senate of the nation, the only individual, in any branch of the government, who had been a member of the ‘immortal Congress of 1776.’”

The biographer has produced, as yet, but few personal anecdotes of his subject. So far as he has gone, he has traced his public career in a manner, which, if not very attractive or piquant, is at least marked by temperance, intelligence, and general correctness of expression and reflection. He could not avoid travelling over grounds which had been so much frequented, that scarcely any thing new or striking remained to be touch-

ed. We could hardly except, from this remark, perhaps, details like the following, though we cannot doubt they will fix the attention of every American reader:—

“Some insight may be gained through the accounts of the delegates, into the manners and modes of men exercising the sovereignty of the American empire, and exposed to the direct or secret offers of the agents of the British ministry.

“The supreme power of the country was in the hands of less than forty men, living together with the simplicity of a private family, indulging themselves indeed with the comforts of gentlemen, but wholly abstaining from parade, extravagance, or luxury. The purity of their private life, was not less admirable, than the patriotism of their public conduct. There was a great want of money among them, and the very limited compensation allowed in the different departments of the civil service, was controlled or suspended from actual deficiency of means to supply it.

“Among the letters addressed to Mr. Gerry after his return to Massachusetts, by his companions in Congress, is one from which the following extract is taken.

“‘Jemmy’ has published a silly story about our friend ——— keeping Mrs. ———. Poor fool! He does not know that scarcely one of us can keep himself.

“‘I now owe one hundred and forty-seven dollars for board and some little borrowed of my landlady, besides twenty-six borrowed for every day expenses, and perhaps sixteen more to tailors and shoemakers. How under Heaven am I to get this with provincial paper, which does not pass here for any thing at all, and is next to nothing where it was issued? You speak of my soon being at home! I own no horse, or I might ride away from these great debts, and ask charity on the road for a delegate from ——— to enable him to reach home. If I could get there, what’s to be done? I shall be without any income, and without a hint from any man that he will employ me in any way within the compass of my abilities. Bad as my present state is, it compares very well by the side of nothing. I don’t mean to complain, my good friend, for my pay is as much as my colleagues. But I wish when it comes, it would keep me alive. I suppose it is not wrong to serve here as a delegate for a living, any more than in the church or college, or a school. I am willing to bear patiently the injury the war has brought on me and my family, in common with many others, but I see no way of staying here, or living at home, and I suppose I must submit to banishment from my native province to some newer quarter, where land is easy to be had, or education may ensure employment.

“‘To quit all connexion with the contest in the present stage of it, and to take horse and saddle bags, if they can be got, in the hope of ‘making something handsome,’ as the phrase goes, out of credit, does not exactly fall in with my wishes, though it may with my necessity.’”

“The agents of the country abroad were not in a much better condition.”

“MR. JOHN ADAMS TO MR. GERRY.

Paris, Feb. 29th, 1780.

“MY DEAR FRIEND,

“This goes by the *marquis de la Fayette*, whose military ardour cannot be extinguished nor abated by the pleasures of Paris, nor the honours of Versailles, nor the profits of a great fortune, nor by the charms of a beautiful wife, nor the comforts of very fine children.

“He took leave of the court in our American uniform, and with his congressional sword, which is as fine a one as any in the world.

“I have but a moment. Pray remember us. Give us orders to draw you know where. Without these, we shall be in a few months, if not weeks, reduced to

* The printer of the tory newspaper in New-York.

go about begging or borrowing of individuals, and be very glad to obtain a subsistence even in this humiliating way, which however will have a worse effect upon the public than upon us, as it will make the United States ridiculous.

"Your's,

"JOHN ADAMS.

"Mr. Gerry."

"The Massachusetts delegation at Philadelphia, usually lived and messed together at some respectable boarding house. The club of wine, which was assessed equally and charged in their account with the state, shows a very moderate indulgence of the pleasures of the table. Mr. Gerry appears to have retained a private servant and a pair of horses. Some others were without either of these conveniences. A ride, a walk, or a conversation party, constituted their chief means of amusement. The absorbing interest of public concerns, the constant vicissitude of events, the recurring novelties in political affairs, which every day presented, seem to have furnished means for relaxation from the duties of the hall.

"The public mails formed a very inadequate source of supply for the impatient curiosity, which was continually excited. Expresses were interchanged between Congress and the army, at the pleasure of its presiding officer, and were of course intrusted with the letters of the members. Private travellers often out-rode the public mail-carriers, and anticipated their intelligence. Newspapers did not inundate the country. Thus the channels of intelligence being uncertain, the searching after the latest advices, comparing different rumours, sifting true reports from false, analyzing and determining the state of things obscured by contradictory stories, and discussing their probable operation, furnished sufficient occupation for the little time not actually devoted to the public service."

The *correspondence*, which forms a considerable part of this volume, is likely to be regarded as its chief recommendation. There is much sound and characteristic wisdom, much curious narrative, much sentiment and fact illustrative of the revolutionary times and men, in the letters of Gerry himself, of Samuel Adams, John Adams, Hancock, Joseph Warren, Hawley, Francis Dana, Knox, Thomas Jefferson, Sewall, &c. In going through the book, we margined for quotation, a variety of pregnant passages; but, under the impression that the whole correspondence may be consulted with profit, we content ourselves with referring to it, as worthy of particular perusal.

ART. VIII.—SCANDINAVIAN LITERATURE.

- 1.—*Edda Sæmunder hins fróða, Collectio Carminum veterum Scaldorum, sæmundiana dicta, ex recensione Erasmi Rask curavit A. A. Afzelius, Holmiæ, 1818, 8vo.*
- 2.—*Snorra-Edda ásamt Skáldu ok þar með fylgjandi ritgjörðum, útgefin af Rasmúsi Rask, Stockhólmi, 1818, 8vo.*
- 3.—*R. Rask om Zendsprogets og Zendavestas Ælde og Ægthed, Köbenhavn, 1826.*
- 4.—*Den Gamle Ægyptiske Tidsregning, efter kilderne på ny bearbejdet af R. Rask, Köbenhavn, 1827.*

THE ancient history of those Scandinavian and Teutonic nations who subverted the Roman empire, and founded the modern states of Europe upon its ruins, has always justly been regarded as an object of rational curiosity by their civilized descendants. The concise text of Tacitus has been studied and commented with intense interest; but had the philosophical historian been as familiar with the history and manners of the Scandinavian nations, as he was with the other less remote tribes who were destined to be the conquerors of his countrymen, the researches of the learned, in modern times, would probably have been much facilitated. It is, however, in the ancient languages of the northern nations, that their history and antiquities must be explored. The formation of these languages is in itself an object of great interest to the student of human nature. The early progress of these nations, in the arts which are appropriated to civilized life, has probably been exaggerated by the fond enthusiasm of those who are devoted to these studies, but the *Runic* inscriptions which have escaped the ravages of time, and the destroying zeal of the missionaries, show that their language was at once rich, copious, and energetic. Situated near the polar regions, under a firmament enlightened by the reflection of bright snows, by the flashes of the aurora borealis, or by a summer sun almost perpetually above the horizon,—the face of heaven was hardly ever veiled from their eyes. Surrounded on every side with broad seas, which the necessities of subsistence and intercourse compelled them to navigate, they watched the stars, and gave to them expressive and poetical names. Like the Greeks, they used the letters of the alphabet for the purpose of expressing numbers, but in a different order; and upon some of the *Runic* pillars, (of wood,) which are still preserved in the museum of the University of Copenhagen, there are traced rude calendars, sufficiently exact to satisfy their simple wants. Most of these, indeed, are of a date subsequent to the introduction of Christianity, but they are evidently copied from more ancient models. But it was in the

poetical art, like most nations in the early dawn of civilization, that they chiefly delighted. Their history, laws, and precepts of religion, were all preserved and communicated in verse. The *Scalds*, like the bards of Germany and the Celtic tribes, were at once poets, priests, and legislators. They followed the warrior princes in their excursions by sea and by land, celebrated their exploits and virtues, and animated their courage and patriotism. They sung the praises of heroes, and delivered the oracles of the Gods.

It is well known, that the present inhabitants of Iceland derive their origin from a colony of Norwegians, who settled there in the ninth century. Whilst the Scandinavian peninsula was desolated with war, and darkened with superstition,—the inhabitants of this remote and sequestered island pursued with ardour and success the study of Scandinavian literature, and recorded in their *Sagas* the exploits, fabulous and true, of their ancestors. One of the most curious monuments of this literature, is that commonly called the *Edda*, a system of mythology which is said to have been compiled in Iceland in the thirteenth century, and which has been constantly studied by the antiquaries of Sweden and Denmark, as containing the most precious remains of their historical traditions. After the conquest of Italy by the Goths in the sixth century, their national pride, which delighted to revert to a supposed Scandinavian origin, was flattered by one of the courtiers of Ravenna, Cassiodorus, who published a Gothic history, the original of which has been lost, but was abridged by Jornandes, an imperfect copy of whose work has been preserved. In this history, their origin is deduced from the Scandinavian peninsula, on the faith of some ancient Gothic chronicles in verse, which were preserved by tradition in the nation. But the complete and perfect text of the *Edda*, or rather the *Eddas*, (for there are more than one of these collections of chronicles or songs,) was never given to the world until the publication of the two volumes, the titles of which are first prefixed to this article. They contain the entire text of these curious books, in the original ancient Scandinavian or Icelandic language, the parent of all the modern dialects of the north of Europe, especially the Danish and Swedish. The first mentioned work is a collection of songs, mostly of the Pagan times, relating to the exploits of the deities and ancient heroes of the North: the second, is a prosaical view of the Scandinavian mythology and poetical art, interwoven with many stories and songs of the ancient Scalds or bards.

The vast attainments of the learned editor of these publications, who is still a young man, will perhaps be rather appalling to our more languid and moderate students. His genius early received its bent and direction by an ardent passion for the philosophical

study of languages. Previously to undertaking the above works, he had spent upwards of three years in Iceland, and had published, (first in Danish, and afterwards in Swedish,) a grammar of the ancient Scandinavian tongue, still preserved and studied in that island. He had also published a lexicon, *Islandico-latino-Danicum*, which was originally compiled by a native Icelander, *Björn Haldórson*, and participated in several other publications relating to the ancient Scandinavian and Anglo-Saxon literature. After he had completed the publication of his Icelandic grammar, and of the *Eddas*, at Stockholm, he proceeded on his travels through Finland to St. Petersburg, where he remained nearly a year, for the purpose of studying the Finnish, and especially the Slavonic class of languages, and to ascertain their connexion with the languages of the North. He had before traced an affinity between these two classes of languages, in a treatise which he published in Danish, at Copenhagen, in 1818, entitled *Undersøgelse om det gamle nordiske eller islandiske Sprogs Oprindelse*, part of which has been translated into the German by the late Professor J. S. Vater, in his *Vergleichungstafeln*, Halle, 1822. In order to pursue his favourite object of investigating the affinity of the Asiatic languages with the European, he travelled through the Russian empire by the way of Moscow, Astrachan, and Mosdock, to Tiflis, in Georgia, where he remained several months engaged in the study of the Persic, to prepare himself for a tour through Persia. From Tiflis, he went by the route of Erivan, Tauris, Teheran, Ispahan, and Shiraz, to Bushehr, where he embarked in a British ship of war for Bombay,—touching on the voyage at Muskat, in Arabia. At Bombay, he was received with great attention and kindness by the Governor, the hon. Mr. Elphinstone, (well known in the literary world by his travels in Afghanistan,) and was fortunately enabled to purchase a very valuable collection of MSS. relative to the *Zendâvestâ*, for the university at Copenhagen, whither he brought them on his return to Europe in 1823. On these original and very ancient MSS. is founded the above treatise, *Om Zendsprogets og Zendâvestâs Ælde og Ægthed*, (on the age and genuineness of the *Zendâvestâ* and the Zend language,) written originally in English for the Bombay Literary Society, but afterwards translated by the author into Danish, and read before the Society of Scandinavian Literature, at Copenhagen, and published in their Transactions. It was translated into German, and published at Berlin in 1826, by Professor Van der Hagen, enlarged with an Appendix containing a dissertation on the whole Japhetic (European) stock of languages, selected and translated from other papers of the author. In this work, Professor Rask has attempted to restore the ancient Zend alphabet, many of its letters having been mistaken and confounded by the French

orientalist Anquetil du Perron. A plate is annexed, representing the alphabet of Du Perron, together with the new one reformed by our author. From Bombay, he proceeded in company with Captain Close, the British resident at the court of Scindeah, the Mahrattah chief, to Gualior, and from thence through Agra, Benares, &c. to the Danish settlement of Serampore, and thence to Calcutta. He then came by sea to Madras, and the Danish factory of Tranquebar, on the Coromandel coast, and afterwards to Columbo, in the island of Ceylon. Here he embarked in an English vessel for London, but was unfortunately shipwrecked before losing sight of land, and again returned to Columbo. Most of his MSS. and other collections, were preserved, and after a considerable stay at Columbo, he returned back to Tranquebar, Madras, and Calcutta, in order to procure a passage home in a Danish vessel. After his return, he was appointed professor of Asiatic Literary History in the University of Copenhagen, and published a Spanish grammar, (on a new plan,) an Italian grammar, and a grammar of the ancient Frisic language—also a new system of Danish orthography, and the above treatises on the *Zendávastà* and Egyptian chronology.

The essay on the *Zendávastà*, or institutes of Zerátusht (Zoroaster) was written in refutation of a paper by Mr. Erskine, published in the Transactions of the Bombay Literary Society, on the *Sacred Books and Religion of the Parsees*. Its object is to re-establish the opinion of M. Anquetil du Perron, (which Sir William Jones was supposed to have overthrown,) that the Zend was the most ancient language of Media, related indeed to the Sanscrit, but by no means a dialect of it, as Sir William Jones supposed, but an original language like the Greek, which it is well known is also related to the Sanscrit. Another object of the author was to show that the *Zendávastà* was written previous to the conquest of Persia by Alexander, and is not a modern compilation—upon the whole, he does not seem to think that Sir William Jones obtained so easy and unqualified a victory over M. du Perron, as is commonly understood, although the latter has certainly made some mistakes as to the structure of the Zend language.

Professor Rask admits, according to the generally received notions on this subject, that there is a certain analogy and connexion between the Sanscrit and Scandinavian languages, though he does not seem to consider the resemblance so close as some have assumed. This affinity is rendered particularly evident by an examination and comparison of the Lithuanian, still spoken in the interior provinces of Prussia, and in the Russian government of Wilna. The Latin and Greek belong to the same stock of languages. He divides all languages, as the great human family is divided,—into, 1. *Races*, the languages now in question belong-

ing to the Japhetic race. 2. Into *Classes*, as the Indian, the Irânian, the Celtic, the Slavonian, and the Gothic; being all separate and very distinct classes, though belonging to one and the same race. 3. *Stocks*, or *Stems*, (*Stamme* in Danish,) such as the Teutonic and Scandinavian, which both belong to the same *class*, but in their internal structure are almost opposite to each other. 4. *Branches*, such as the upper and lower branches of the German. 5. *Languages*, such as Icelandic, Danish, Swedish of the Scandinavian stock,—or Dutch and English of the Low German branch,—or Mæso-Gothic, High-Dutch, &c. of the upper German branch. 6. *Dialects*.—A particular account of this classification of languages is contained in the appendix to Von der Hagen's translation of the above-mentioned work.

Professor Rask found that the Caucasian languages are entirely and radically different from those of the Japhetic race; except the *Ossetic* and *Dugoric* dialects,—these two being derived from the ancient Median or Zend tongue, as had before been demonstrated by Klaproth, the celebrated traveller in Caucasus. The other languages in that region cannot be arranged in one group, and are hardly reducible to less than seven different *stocks*, if not even different *classes* of languages.—Most of them, however, do belong to the Scythian *race*, and consequently seem to be related, more or less, to the Tartar and Mongol tongues of middle Asia.

The last of the works, the titles of which are prefixed to this article,—is a treatise on the Chronology of ancient Egypt. We have essayed an examination of this dark and intricate subject in a former number of our Journal, in connexion with the brilliant discoveries of Champollion upon the hieroglyphics. (Am. Qu. Rev. No. II. Art. 6.) Professor Rask has pointed out some mistakes in *Pritchard's Egyptian Mythology*, a work published in London in 1819,—and has in many instances arrived at a different result. According to him, the kingdom of Egypt was founded by Menes—2484 B. C.—Abraham came to Egypt in 1834,—the Exodus of the Israelites took place in 1619, at the death of Trithmôsis, king of Egypt. The city of Troy was taken by the Greeks in 1209,—the date assigned to that event by the Arundelian marbles.

The study of Scandinavian literature and antiquities, has been recently revived and pursued with increased interest in Denmark. Professor Nyerup, so well known for his patriotic zeal in the cultivation of the national language and literature, published, in 1806, “A coup d’œil on the ancient monuments of our country, such as they would appear when arranged in a future national museum.” In this publication, he proposed the establishment of such a museum, in order to collect and preserve those ancient monuments which might otherwise be dispersed and ultimately

lost, without this care; and that it should be arranged in such a manner, that the patriot antiquarian might conveniently study the successive progress of the social improvement, arts, manners, customs, opinions, and institutions of his country, as depicted in these reliques of former times. In consequence of the attention to the subject which this work excited, a considerable sum was soon collected and placed in his hands, to defray the expenses of forming the establishment. In 1807, he published an invitation to contribute to the proposed collection. Soon after, a royal commission was named for the preservation of the antiquities of the North, of which Professor Nyerup became one of the most active members. This commission not only set about collecting and preserving these antiquities, but also undertook the explanation of them, and for this purpose commenced the publication of a series of antiquarian annals. An excellent plan was adopted for the purpose of rescuing from oblivion, such antiquities as might still remain undiscovered or unnoticed in different parts of the country. A circular was addressed to all the parochial clergy of the kingdom, and every clergyman was furnished with a particular set of instructions for the discovery of ancient monuments, and premiums were offered to stimulate the diligence of the peasants in searching for such objects. The employment of these means was attended with very great success, and the museum, which has been collected in an apartment adjoining the library of the university, contains upwards of 6000 articles. This cabinet is extremely well arranged in chronological order, and is exhibited to the public by Mr. Thomsen, counsellor of the Danish chancery, who is distinguished for his enlightened zeal in the study of antiquities, and who contributed very essentially to the formation of this great collection. Besides numerous monuments of a date posterior to the conversion of these countries to Christianity, and illustrative of the history of the kingdoms of Denmark and Norway since the tenth century, it contains, 1. Arms, symbols, and utensils of stone, used by the Scandinavian nations before the use of metals was introduced. Among these is a very large number of cuneiform, or sharp-pointed stones, vulgarly called *thunder-stones*, from their supposed celestial origin. There are also the stone tools which were used in the formation and sharpening of these. Some of these objects are remarkable on account of the localities where they were found. Many of them were taken from ancient tumuli, and one of them from the sepulchral mound of Harold Hiltetand. There are also knives, axes, hammers, arrow-heads, &c. some of them extremely well wrought in porphyry and serpentine. Among others, is a remarkable stone in a star-like form, with a hole in the centre, which was fished up in the sea near Copenhagen, and is supposed to have been an anchor. Many of these articles bear a remarkable re-

semblance to the rude arms and utensils of our North American Indians, and seem to indicate about the same degree of progress in civilization. 2. Cinerary urns, of which there are one hundred in number, some of them of gold, covered with wrought figures, and others of glass, copper, and rude pottery. They show that the custom of the classical nations of antiquity, of burning the bodies of the dead, also extended to these rude tribes of the North. 3. Similar remains of ashes and bones found in the sepulchral mounds, showing that the ancient hero of the North was buried with his arms, his horse, and his faithful dog. 4. *Sacra*, or various objects belonging to the Pagan worship, such as idols, amulets, and censers, of gold, amber, and bronze. 5. Personal ornaments of various kinds and of different metals. Among these, is a number of articles found in the tomb of *Thyra Dannebod*, the last of the race of Pagan queens of Denmark. 6. Ornaments of amber and glass. 7. Arms of metal. 8. Runic monuments. Whenever these last are found still remaining in the places where they were originally erected, the commission determined to preserve them in the same position : but wherever they had already been removed, that they should be placed in or near the museum itself. Some of them have accordingly been placed in the niches of the famous round tower of Longomontanus, which is the present royal observatory. Most of them are covered with prolix inscriptions, which have been interpreted by different antiquaries.

The union of this museum with the Northern antiquities contained in the Royal cabinet, would form a very complete collection. Beside these, there is, in the old Gothic palace of Rosenborg, a cabinet of coins and medals, which contains, among others, a great number of coins previous to the time of Canute the Great, some of which are merely figured, and others have Runic legends. There are also, in several private collections at Copenhagen, particularly in Bishop Munter's and Counsellor Thomsen's cabinets, many coins and medals illustrative of the antiquities and history of the North. The Royal Library contains about 300,000 volumes of printed books and manuscripts, and that of the University about 80,000. These two libraries, taken together, contain probably the completest collection of works relating to northern literature, which any where exists. The Royal Library was founded by Frederick III., in 1663, and has been since gradually augmented by the munificence of his successors, and by various private donations. It is deposited in a building adjoining the chateau of Christiansborg, and narrowly escaped destruction, when that vast edifice was consumed by fire in 1794. It is opened to the public, for the use of students, with great liberality. The principal hall is about 290 feet long, and 40 feet wide. The middle of the floor is flagged with black and white

marble; and the capitals of the pilasters, which run up between the alcoves, are handsomely gilt. There is also a gallery, with triple rows of shelves. In this apartment are deposited the works on theology, history, philology, ancient classical learning, and modern belles lettres. The second apartment is constructed in the same style as the first, and is about 65 feet long, and 40 in breadth. It contains the works relating to mathematics, natural history, the physical sciences, voyages and travels, &c. In a third room, above the second, and of the same dimensions, with a double gallery, resting on pillars, is deposited the collection of books relating to Scandinavian and Danish literature and history. A gallery which connects the library with the palace of Christiansborg, is appropriated to the MSS., and the works on jurisprudence. It contains the valuable oriental MSS. collected by the celebrated traveller, Niebuhr, and a considerable number of Pali and Cingalese MSS., purchased in Ceylon, by Professor Rask. It also embraces the collection of Uldall, the courageous advocate of the unfortunate Queen Caroline Matilda, relating to northern history and jurisprudence, and that of the Danish historian, Suhm, also relating to the history and literature of the North. This last was connected with the notes, translations, and other MSS. of the celebrated German critic, Reiske, relating to Arabic and classical literature, who, at his decease, left his widow no other fortune, than these fruits of his own industry and research. She offered them to the princes of his own country, but they having declined the acquisition, Suhm granted her an annuity for them. He expended a large fortune, in collecting a library, which was augmented to about 100,000 volumes, in 1796, when he sold it to the king for an annuity. He was a very munificent patron of literature, and published at his own expense, a splendid edition of Abulfeda's Arabic Annals, in five quarto volumes, which was edited by Professor Adler. Suhm also contributed to the publication of the great collection of chronicles, relating to the history of Denmark—*Scriptores rerum Danicarum*, on the plan of the famous edition of the historians of France, by the Benedictines. After the death of the editor, under whose superintendence the first volumes were prepared for publication, Suhm continued to superintend the work down to the seventh volume, leaving the eighth unfinished, at the time of his death. He also wrote the prefaces to a work entitled "Collections for a History of Denmark," drawn from his MSS. by Professor Nyerup. That veteran of literature, has also since continued a Danish history, which had been commenced by Suhm. The latter also published several of the ancient Icelandic *Sagas*, in eight quarto volumes, at his own expense.

A legacy was bequeathed about half a century since, by a pri-

vate individual at Copenhagen, for the purpose of founding a professorship of Scandinavian history, &c. It will soon, with the accumulations of interest, amount to a sufficient sum for that purpose. In the mean time, the publication of the *Sagas* has been continued, from the Icelandic MSS. contained in the Library of the University, which were collected by a native Iclander, Arne Magnusson, or *Arnus Magnæus*, as his name has been Latinized, by a royal committee of learned men, called the *Arna Magnæan* commission. The last *Saga*, published under their direction, is entitled *Laxdælasaga*, Icel. & Lat. 4to. Copenhagen, 1827. A society for publishing ancient historical works in Icelandic,—together with Danish and Latin translations, was established in 1825. They have published—1. *Olaf Tryggvason's* (king of Norway,) *Saga*, in 3 vols. 8vo., with a translation into Danish, in the same number of volumes, and have commenced a Latin translation.—2. *Jómsvikingasaga* and *Knyttlingasaga*, in one large 8vo. volume, containing the history of the Danish kings, from Gorm the Old and his predecessors, down to Canute VI., of which no translation has yet appeared. There is also an *Icelandic Literary Society*, for publishing modern books, diffusing knowledge among the common people of Iceland, and preserving the ancient language, as it is still spoken in that island. They have published a history of Iceland, during the middle ages, entitled *Hurlungasaga*, together with the continuation of Mr. Espólin's work, entitled *Island's árbaerer*, being annals of Iceland down to the beginning of the 18th century. Lastly, there is a *Scandinavian Literary Society*, established in the year 1797, of which Professor Schlegel, well known by his controversy with Dr. Croke, upon Sir W. Scott's famous judgment in the case of the Swedish convoy, is President, and which has published several volumes of Transactions.

We have collected together the above notices, supposing they might not be without interest to our readers. Let it not be said, that these studies are merely speculative, and that they are useless for any of the practical purposes of life. There are many branches of science, which cannot be directly applied to any such purpose, and yet are of great dignity and real importance.

Homo sum, humani nihil à me alienum puto.

And there is nothing appertaining to the moral history of man—as diversified by difference of origin and race—language, religion, laws, manners, and social institutions,—which can be considered wholly useless to the student of human nature. If it be true, as Cicero says, that all the humane arts have a certain common ligament, and are intimately related together, it is not less true, that all the liberal arts and sciences contribute to reflect mutual light. A familiar knowledge of the early

history and manners of our own country—of its authentic annals and romantic traditions—of the lives of its heroes, bards, and legislators,—contributes to nourish a warm spirit of patriotism, and to fortify the honest sentiment of national pride.—These studies open new regions of imagination—they unfold to the poet's eye a new creation, whose wild-flowers have hitherto “blushed unseen,” and whose wonders he may make his own.—All this is felt by the scholars and patriots of the northern nations of Europe. But even to us, the literature of the North must have its interest,—since we deduce our origin, our language, and our laws, from the Scandinavian and Teutonic races. The filiation of languages is not only a curious subject of philosophical inquiry,—but an acquaintance with it, is absolutely essential to a perfect knowledge of the structure of our own language, derived as it is from the mingled streams of all the Northern dialects, and enriched with the addition of copious supplies from classic sources. We have seen the great family of man, from the banks of the Ganges to the shores of Iceland, with few exceptions, speaking languages having their common root in the venerable Sanscrit. The pursuit of these investigations has been associated with the loftier and purer purpose of diffusing the light of the gospel over the same regions. Frederick IV. of Denmark, was the first prince who sent Protestant missionaries to India.—The Danish establishment at Serampore, is the great scene of literary and religious activity in the East.—But it is on the bleak and barren coasts of Greenland, that their noblest conquests have been achieved ; and it is here again, that we are indebted to the Danish missionaries for our knowledge of the singularly fantastic structure of the dialect spoken by the natives of that desolate country. In the gardens of Jægerspris, where the present king of Denmark, when crown prince, erected monuments of Norwegian marble to the benefactors of their country,—amidst those of heroes and sages, stands an humble pillar, on which are inscribed the names of Hans Egede, the first missionary to Greenland, and Gertrude his wife, who shared with him all the hardships and privations of his voyage and long exile in that region, whose map is delineated on the same stone.—Happy the nation which can boast of such trophies, and happy the men who have thus found the true road to immortal fame !

ART. IX.—*London Quarterly Review*, No. 73. *Article VIII.*
The United States.

IN the task we have undertaken in the following pages, we have a warrant for taking up a Review as a proper subject for examination. It is in full accordance with our stipulated duty, and the promise we made in the prospectus of this journal. We there declared our "design to be national." We promised that "the work will be truly *American* in spirit and drift"—"patriotism, alert, emphatic, resolute, *militant* even, under certain circumstances, is a trait which should distinguish it and every similar production of this country." When, then, an unjust and vituperative attack is made upon the character, condition, and institutions of our country, in the guise of a review, or in any other way, we do but redeem our pledge to the American public, in refuting its calumnies and exposing its falsehoods. Upon these grounds, we believe we have a full justification for the remarks we shall offer upon the article mentioned at the head of our page, from the "*London Quarterly Review*."

However honest, intelligent, and liberal, an Englishman may be upon other matters, the moment he undertakes to speak or write about the United States, he becomes bewildered and absurd. This is the point of his insanity; and he will be sensible and just in his opinions and observations, until he touches this unfortunate subject. In a moment, truth is no longer truth; evidence ceases to have any influence on his mind, and he is unable to distinguish between the most clear and settled facts, and the prejudices and nonsense of his national pride. Every mad-house abounds with such cases of partial derangement; and neither the philosopher nor physician has been able to account for it. Even now, when neither the writers nor the readers of the calumnies upon our country are really deceived by them, they cannot deny themselves the momentary pleasure of repeating and listening to them.

The "*London Quarterly Review*," from its earliest existence, has led the van in the political, moral, and personal phillippics that have been poured, without ceasing, upon us, ever since we set up in the world for ourselves; and, it must be confessed, it has led it like a valiant captain, a very *Dalghetty*, devoted, body and conscience, to his contracted service, and overleaping every impediment between him and the performance of his orders and bounden duty. It has denounced our goodly territory as the land of "despotism, poverty, and disease;" as if men and nature combined their worst influences to curse it; as if our atmosphere was never sweetened by the purifying sun; nor our earth refreshed by kind and fertile showers. And yet we do live on increasing and multiplying, not entirely crushed by our despot-

ism ; nor famished by our poverty ; nor devoured by disease. Now, it is really too much to be reproached with poverty by the loyal subject of a monarchy, who counts among his fellow subjects *millions* of paupers, maintained by an assessment on the community of nearly *ten millions of pounds sterling*. The author of this intrepid sentence must have looked around for an extraordinary burst of applause ; and probably received it from his happy and more prosperous countrymen.

In the review given in this British Journal of the travels of the child "Frederick," there are several striking examples of English blindness to clear and unquestioned facts ; and of a reckless audacity of assertion, in the very front of evidence and probability. It is our intention to notice some of these, because they come to the world under the sanction of an authority certainly much respected, and much entitled to respect, in its general bearing and character. Before we enter upon this duty, we have real pleasure in admitting, that the author of the article has not been backward in displaying the vast physical means of greatness enjoyed by the United States ; and in acknowledging the industry and ability with which they have been, and continue to be, brought into operation and use. We and our doings, in this respect, are spread before the world ; and have grown to a size not to be overlooked or safely misrepresented. The attack is made upon subjects not so important, so obvious, or extensively known and understood ; but still sufficient to gratify, in a degree, the morbid English appetite. We have outlived a host of the slanders and slanderers that once annoyed us ; and every year narrows the ground of attack ; it is gradually washed away by the power of truth and time. The narration of *De Roos*, and the work of some anonymous pseudo-German, entitled "North America and the United States as they are," are placed at the head of the article in the *Quarterly*, to which we are about to draw the attention of our readers. With these profound and brilliant travellers we have nothing to do ; our business is with the Reviewer, who has used them merely as an introduction to his own sagacious and veracious remarks upon our country.

The Reviewer passes leniently enough, but certainly without approbation, over the pert nonsense of *De Roos*, endeavouring to cover him by a truism which has no application to the labours of that distinguished tourist. "If," says the indulgent critic, "the book itself be good, and found to convey facts not known before," we should look "at the shortness of the time in no other light than as a proof of the activity and industry of the traveller." This appears to us to be very like arrant nonsense. A traveller tells me that he jumped fairly over St. Peter's, at Rome ; and "in common courtesy" I reply, if it is true, we should consider it "in no other light than as a proof of his activity." We have

thought there is a distinction between the possible and the impossible ; and no courtesy requires of me to confound them, and give a qualified credence to what I know cannot be true.

We entirely concur with the Reviewer in rejecting the statements of "the Fearons and Fauxes," although we cannot perceive that their observations were "meant to be complimentary;" and we also adopt his opinion, that "we are still in want of a clear, expanded, and intelligent view of this great and growing republic, from the pen of a *gentleman*." The four men of rank and admitted talent, who "some two years ago traversed the greater part of the United States," we believe, had better opportunities and better dispositions to speak of us as we are, than any of "the superabundance of English travellers," who have become the organs of calumnious misrepresentations, to widen differences between nations that every just and liberal feeling ought to draw together ; inflaming animosities which even self-interest would allay ; and planting prejudices and hatreds to misguide and afflict posterity. If we repel such attacks resentfully ; if we extend that resentment, beyond the immediate offenders, to the whole people by whom these vipers are cherished, and their poison greedily swallowed, we act but upon a natural feeling of self-defence, and a warranted retaliation. When English gentlemen, travelling through our country, shall render us more justice, and the English feeling be corrected on our subject, we shall cheerfully meet the conciliating spirit ; and forbear from recriminations forced from us by goads and stings.

It is a truth, that there is among the people of the United States, no ungenerous hostility to those of England ; we feel, in the midst of injury and insult, the influence of a common ancestry ; a common language, religion and literature ; and they will have our kindness and respect whenever they shall choose to deserve and value them. If we are rivals in science, ingenuity, and industry, we well may be so, with a just and generous emulation, and not with a persecuting, indignant hostility. In proof of the general prevalence of our kind disposition towards Englishmen, we may refer to their various travellers who have visited our country ; who, with the exception of some that were entitled to no respect in any country, agree in strong acknowledgments of the good treatment they received every where. One of them, a British officer, says that he landed in America expecting neglect and even insult wherever he should be known. On leaving us, he declares with great sensibility, that from the moment he set his foot on our shore, to that of his departure, he met with nothing but the most gratifying attention, liberality, and kindness. It should not be overlooked, that he travelled through our roughest western population. The four gentlemen of rank and talent, alluded to by the Reviewer, will doubtless bear the same testi-

mony, for they frequently did so ; the most cordial hospitality was freely accorded to them ; and their manner of receiving it, gave universal satisfaction. How often was it remarked, *si sic omnes*.—We assure the Reviewer, that if our “national feeling,” towards England, “has generally been considered as any thing but friendly,” it is not our fault, but because Englishmen have, generally, manifested no disposition to engender or reciprocate a friendly feeling with us. Precisely in this spirit, we proceed to our remarks upon the review before us, eager to acknowledge every act or phrase which evinces any kindness ; and equally determined to repel in plain terms every attempt to injure or degrade us.

The Reviewer, after giving a cursory account of the improvements now in progress in the United States ; and some well deserved compliments to the patriotism and long-sighted sagacity of the “great and good” Washington on that subject ; offers his speculations on the probable permanency of our republican, united government. This is a favourite topic with foreign politicians, although it is the one of which they have the least knowledge. The foundation and structure of the European monarchies are so unlike those of our government ; their political principles and social institutions so dissimilar ; the *modus operandi* of political power in its practical application to the rights and business of the community, is so peculiar to ourselves, that a stranger, especially the subject of a monarchy, will always reason from false premises in his conjecture about the future condition of the United States. It is even useless to attempt an explanation to such a listener ; we must trust to time and events to refute the prognostications of our disunion, as we have as to other confident prophecies of our ruin since our first existence ; and we have no fears on this subject ; and with the knowledge we have of the fixed and growing attachment of our people to their happy and prosperous government, we feel no more alarm from the gloomy forebodings of European theorists, than from the occasional menaces of some of our own heated politicians. We understand exactly how the machine works—what is its strength, and how it is balanced and regulated ; and the experience of half a century has confirmed our confidence in its fitness for all the purposes of a just, wise, and efficient administration of our affairs at home and abroad. The anticipations of the enemies of our republic have been utterly dissipated, and the best hopes of its friends more than realized.

The Reviewer has taken upon himself to furnish his readers with a piece of information, so important, that he should have favoured them with the authority from which he has derived it ; and he has presumed too much on their credulity, when he offers nothing to support it, but the assertion that “it is well

known." He says, "The Confederacy, *it is well known*, was on the very verge of being dissolved, when, at the conclusion of the late general war, from a generous feeling, and, we must say, a heroic spirit of forgiveness, England held out favourable terms of peace; what England might at that time have done most justly, she could have done with all imaginable ease; namely, crushed the whole fabric of the federal government." We challenge the Reviewer to produce, even from their Fearons and Fauxes, a grosser example of careless audacity; of English gullibility and nonsense, than is found in this sentence. That there was much disaffection in the United States, to the late war with England, is most true; but not more than in England, in her war with revolutionary France; and that, towards the close of that war, the federal finances were exceedingly embarrassed, and straightened, and the public credit alarmingly reduced, is also true; but that a dissolution of the confederacy was contemplated, or even feared, by any party, or considerable body of men, is without evidence, as it is without truth. It may have been "well known" in England, where probably it was devoutly desired, notwithstanding her boasted generosity, and heroic forgiveness; but here it was never seriously apprehended; on the contrary, that war has always been considered, and truly was, an infallible test of the strength of our Union, and the devotion of our citizens to their Constitution, under a deep and wide spread difference of opinion, on the policy of the administration, in their declaration of war. If, to be sure, the Reviewer may be allowed to justify his assertion by the prophecies, anticipations, and denunciations of party journals, during a period of great political violence and heat; or by speeches made, under the same excitement, on the floor of Congress; then we reply to him, that the British government has been ruined and dissolved, a hundred times, by the same testimony; and we could turn to scores of pamphlets, and volumes of parliamentary arguments and harangues, by some of England's greatest men, and most approved patriots, to show her Constitution overthrown, her liberties annihilated, and all the political relations and compacts, between the government and the people, broken and gone. But all this is nonsense; and the Reviewer, who receives it so graciously, in condemnation of our country, would laugh it to scorn, if applied to his own.

But even this is not the most ridiculous part of the paragraph we have quoted. England, it seems, more sharp-sighted to our interests, than we were ourselves; anxiously perceiving our danger, and alarmed at the prospect of our impending dissolution, "from a generous feeling, and heroic spirit of forgiveness," held out to us favourable terms of peace; "forbearing to do what she could have done most justly, and with all imaginable ease;" namely, "crushed

the whole fabric of the federal government." To cap the climax of this sublime absurdity, it is averred, that "ten thousand of the men that had fought at Waterloo, would have marched through North America." Every body remembers the like boast made by Burgoyne, about fifty years ago ; and how it was verified, by the capture of himself, and his ten thousand ! We will say nothing of the folly of talking of nations giving a favourable peace to an enemy, from motives of generosity and heroic forgiveness ; of the greater folly of believing that England would give peace to us from such motives ; and that she would give a favourable peace to a "feeble enemy," wholly at her mercy, only to preserve that enemy from absolute ruin ; and that she would do all this without requiring from the prostrate foe a single sacrifice, or securing for herself a single benefit, as the reward of her generosity. No indemnity asked for her enormous expenditures ; no security for the future, on the points of controversy ; no surrender of a principle or pretension ; but a peace as fully and fairly reciprocal, in all its terms and circumstances, as ever was made between two equal nations, standing on equal ground, equally independent and secure. Who is this Reviewer ? In what obscure corner was he dozing, during the war of which he speaks so flippantly, that he is so ignorant of its events ? Has he read nothing of its history ; or has he forgotten all he has seen and read about it ? Is he now to be told, for the first time, that England formed a new era on the ocean, and was defeated in almost every naval combat ; that her frigates, believed to be invincible, fell, one after another, before the pine ships of the despised republic ; that her sloops of war were captured by vessels of the same force and equipment ; that her proud, and until now, unyielding flag, dropped from its towering height at the feet of the conqueror ; that two English fleets were annihilated on the lakes ; that two British armies, *Wellington armies*, were irretrievably beaten and repulsed ; while her triumphs were principally confined to predatory excursions on our coast ; to burning edifices, hitherto held safe from the rage of civilized warfare ; to the capture of a single frigate, which threw the English nation into an ecstacy of joy ? With all this unquestioned history before his eyes, this Reviewer asserts, we suppose seriously, that ten thousand Waterloo soldiers could have marched through America. The armies beaten at Plattsburgh and New-Orleans, will hardly thank their countryman for sinking them so far below the Waterloo soldiers.

The Reviewer gives us some credit for the extensive and magnificent communications forming between the distant parts of our vast empire, by roads and canals ; not, however, without a reproach for suffering "year after year to pass away, before the attempt was made." He ought to have recollected, that a new coun-

try cannot at once accomplish all that may be desired and intended,—but must wait until the increase of its population, the accumulation of wealth, and the acquirement of the requisite science and skill, enable it to embark in great enterprises of improvement, with a sure prospect of completing them.

We now come to a subject, which, since the late war, has been, and will long be, a sore one with most Englishmen. We make proper allowances for the provocation; and excuse, so far, the irritability produced by it. The Reviewer, assuming the tone and air of a competent judge, but with affected diffidence, says, “it is not for us to decide on the policy of the American government, with regard to the increase of its naval force. A few successful contests, always with an inferior force to oppose, (notoriously untrue,) and the tumultuous blustering of the democrats, who, in fact, rule the country in turbulent times, were the stimulus to this measure.” He then gives, *ex cathedra*, the usual exaggerated English accounts of the force of our *seventy-fours*; as if a British rated seventy-four does not always carry a greater number of guns, and keeps to the number of her denomination, in the strict faith of a legal contract; and he proceeds, “The order of Congress, for building these ships, limited their size to that of seventy-fours;” and then very gravely details the reasons which produced the deceptive termination, and made it expedient to *call* them seventy-fours. We need not examine the correctness of his speculations upon the difference between the orders of Congress, and the size of the ships, as he happens, unfortunately, to be entirely mistaken in the fact. The law, or as it is called, the order of Congress, for building these ships, does not “limit their size to that of seventy-fours; but is as follows:—“For the gradual increase of the navy of the United States, the sum of one million of dollars per annum, is hereby appropriated for three years;” and further, “The President of the United States is hereby authorized to cause to be built, nine ships, to rate *not less than seventy-four guns each*; and twelve ships, to rate *not less than forty-four guns each*.” Thus is refuted, the whole charge of artifice and deception made upon our Congress in passing the law, and our President in executing it—all of which, is supposed by the Reviewer, to be a trick to take in the English, as to the real strength of our vessels.

The great ship in the dock-yard at Philadelphia, “attracts the special notice of the Reviewer, who says, “she is considered, in size and strength, a prodigy”—he might have added, in workmanship, materials, beauty, and naval skill, too.—Mr. De Roos says, “the Americans call her the largest ship in the world.” This big ship is a terrible annoyance to the Reviewer, and has disturbed his imagination and judgment most powerfully.—His nerves give way, under the fearful excitement.—In his agony,

he flounders about, seeking for consolation, from the most irreconcilable sources.—First he reposes on the belief, that she will break her back. “This is,” he says, “unquestionably an enormous ship, and so was the *Commune de Marseilles*, which we took at Toulon; and which, though new and strongly built, broke her back the first strong gale she encountered in our keeping.”—But should “our ship,” escape this dreadful spinal accident, all hope is not lost; for it is profoundly observed, “it is yet to be seen, how the ‘*Pennsylvania*’ will act at sea.” Certainly this cannot be denied, as she is still on the stocks in the dock-yard; from which fact, it might have been inferred, and may safely be asserted, that we have not yet seen how she will act at sea; and, indeed, whether she will ever get to sea at all. Having imparted to his readers all the comfort they can derive from a probable broken back, and the uncertainty of the good conduct of the *Pennsylvania* at sea, the Reviewer explores other grounds, to calm his apprehensions.—“The main question is, so far as we are concerned, have we, in the British navy, any ships to meet and match this monster? Our answer is, many; but, let us take one, the *Caledonia*.”—He does not tell us, whether this meeting and matching are to be before or after the *Pennsylvania* has broken her back, but he is “bold enough to say, she, (the *Caledonia*,) is, *in all respects*, as fine and powerful a ship, and, *if we mistake not*, (no inconsiderable qualification,) a better sailer, and an easier working ship, than the *Pennsylvania* will turn out to be.”—Here we have a ludicrous mixture of assertion and prophecy; of facts without evidence, and anticipations without reason. It will, however, entirely satisfy every Englishman, who clearly sees, in his mind’s eye, the poor *Pennsylvania*, broken in her back, out-sailed, out-worked, and dwindling into a cock-boat, in comparison with the redoubtable *Caledonia*.—How charming it is to have such visions at command, and to derive from them all the pleasures of reality!—The very name of this extraordinary *Caledonia*, which out-monsters the *Pennsylvania*, seems to have imparted to the critic a power of looking into futurity, even beyond the second sight of the country from which she has her name. His confidence in his favourite *Caledonia*, grows, as he dwells on her excellence; and amounts to certainty, when he announces that “we need hardly say, there is not a captain in the British navy, (mark, not one,) that would not, in the event of a contest, be delighted to meet with the *Pennsylvania*, while in command of the *Caledonia*.” We have no doubt, that British naval officers are ever willing and eager to meet and fight any thing, in the shape of a ship.—A thousand instances attest the truth of their fearless valour; and a thousand brilliant successes have proved that their skill is equal to their courage; but, it is nevertheless true, that they have been van-

quished, and their ships made captive by Americans. The delight with which an officer may go into a battle, is no guarantee that he will come out of it with the same satisfaction.—He may do all that he ought to do to obtain success, and be obliged to yield the victory to his adversary. We all remember with how much ecstasy Captain Dacres, of the *Guerrier*, saw the approach of the American frigate, “*Constitution* ;” with what delight he looked to the combat, his only fear being that the Yankee would not fight, but would give him too cheap a victory. We recollect his promise of the prize to his first lieutenant, and his numbering the minutes in which he would put him in possession of her.—The Yankee did fight, and received the flag and sword of the delighted English captain, in about the same time he had promised the American ship to his delighted lieutenant. We doubt not that the captains of the *Java*, *Macedonian*, &c. were equally delighted to meet their enemy, but the issue of the contest proved the fallacy of their confidence. We do not assume, that our officers are more brave than those of England ; but our navy being comparatively small, our ships are better built and equipped, and our crews selected and exercised with more care, than can be done in a navy so monstrous as the British. For a long time, we shall, generally, beat them, especially in combats between single ships. This, however, is running into the future ; we wish to speak only of the present and the past.

Determined no longer to be frightened by the American “monster,” and gathering confidence as he goes along, the Reviewer gives us a long list of ships, in addition to the *Caledonia*, in the British navy, with magnificent names, “most of which are of more than equal metal to the American line of battle ships, under whatever name they may be designated.” It has not occurred to him, that while he has predicted that the *Pennsylvania*, from her great size, must break her back, and will neither sail well, work well, nor act well at sea, he has no such fears for the “*Royal George*,” the “*Royal William*,” and forty others, that are severally more than equal to any of the American line of battle ships. It is only a republican “monster” that is liable to this dorsal weakness, while royalty is protected by a charm. If, indeed, the Reviewer feels safe, in this respect, because his Majesty’s ships have floated along without meeting this calamity ; we may be allowed to take the benefit of their experience as a security for us.

The Reviewer goes into an argument of no mean length, to prove that their thirty-two pounders are more effectual than our forty-two pounders. A short time before the late war, the same question arose between Commodore Decatur, then in command of the Frigate “*United States*,” and Captain Carden, of the *Macedonian*, both lying at Norfolk. The argument of the English

captain was pretty much the same with that now advanced, particularly in the reliance on the circumstance, "that a thirty-two pounder will fire three rounds, while a forty-two pounder will fire only two;" and thus, as Captain Carden expressed it, will throw more iron into the enemy's ship in a given time. Neither of these commanders was convinced by the other, and Decatur ended the dispute by good-humouredly saying to Captain Carden; if our countries should be at war, and we should meet at sea, I will convince you of the truth of my argument. It happened, somewhat strangely, that they did afterwards meet as enemies in the same ships; and Decatur kept his promise, and established the soundness of his opinion by an unanswerable argument; the capture of Captain Carden and his ship. We tender the same argument to the Reviewer. If, however, he is right in asserting the superiority of the British armament and metal, it but increases his difficulties in accounting for our victories.

We will not follow this true-hearted John Bull through the various remaining topics which he discusses to restore the spirits of his countrymen, mortified and depressed by their naval defeats. Heretofore, there was not a man in England who believed any one of the thirty-nine articles half as sincerely, as the impossibility of taking an English ship. Their critical comforter very gravely assures them, they "had no occasion for uneasiness." This is pleasant enough.

The subject of steam-ships and steam-boats, is next brought in review. The "Fulton Steam-ship," is laughed at as a ridiculous failure; but it is acknowledged, that in common steam-boats, we "beat them out and out;" and, immediately returning to his national reluctance to allow us superiority in any thing, he declares he does not believe the fact on which he had made the acknowledgment, although the "authority appears to be good." To soften the pain of this hesitating confession, he says,—"as a set-off, however, the only steam-vessel sent from America across the Atlantic, was so complete a failure, that it is not probable they will try another such experiment." We are glad to have an opportunity to say a word on this subject. When, within the last two years, a steam-vessel departed from England for India, it was pompously announced in an English journal, beating our Reviewer "out and out," that it was the *first attempt* to perform a distant voyage in such a ship. And this was said in the face of the notorious fact, published in every part of Europe and America, that several years before, a steam-ship had left the United States; had gone to England; to Sweden, and to Russia; and returned, without interruption or accident. We now beg the Reviewer to explain to us what he means by asserting, that our experiment was a "complete failure." It may be true that it was found, as the English will probably find, that voyages of this description are

better made by sails and the wind, perhaps on the score of expense or the difficulty of providing fuel, and therefore the experiment has not been tried again ; but as to the main purpose of ascertaining the practicability of making such voyages in steam-vessels, the experiment was no failure, but completely successful. Many years elapsed before it was ventured upon by the English ; and we are yet to see whether they will repeat it. At all events, we led the way in this bold enterprise.

Our diplomatic intercourse with the European states, is brought under the animadversions of the critic, who attacks it with the same intrepid carelessness of facts, with which he spoke of our navy. He charges our Government, roundly, with being "generally prepared to start so many points of controversy, to put forward so many unfounded claims, and extravagant pretensions ; many of them contrary to the established law of nations, their self-interest predominating," &c. In the same sweeping tone of authoritative condemnation, it is declared, that "under an affectation of humility and republican simplicity, no absolute monarchy can be more ostentatious and vain-glorious ;" and finally, our President or his ambassadors scorn to be "guilty of any of those little acts of courtesy and mutual civility, which subsist in the diplomatic intercourse between the organs of the monarchical governments of Europe." To such undefined accusations, it is impossible to reply, but in the general terms of denial, and a reference to our foreign correspondence, to show, not only that a spirit of justice, but of moderation, courtesy, and forbearance, has been its general character. If we look back to the stormy period of the French revolution, and the wars that grew out of it ; to the shameless disregard by all the belligerents of the rights of neutrals, manifestly to force them into the conflict ; to the unparalleled injustice and violence with which they trod down every thing which interfered with their eagerness and efforts to injure each other ; if we advert to the British orders, and French decrees, under which millions of American property were plundered, without any defensible pretext or apology ; "contrary to the established law of nations, their self-interest predominating ;" and then turn to the firm but moderate remonstrances ; to the unanswerable arguments ; to the long and patient forbearance of our government under such injuries and insults, we shall have more reason to charge them with undue humiliation, than with "unfounded claims and extravagant pretensions." The truth is, that this critic has the same grudge against our diplomatic "argumentation" that he has against the strength of our ships ; they have found them both too strong ; and this is an offence not to be forgiven. This superiority of our correspondence is proved, not only by the documents themselves, but by the acknowledgment

of the most distinguished British statesmen ; particularly in relation to the negotiation at Ghent.

Our pretensions upon the subjects of search and impressment, a prominent part of the "new code of maritime law" imputed to us, have been so fully and frequently discussed, that we will here only say, that the difference between us, as to the power of the British government over their own subjects, does not consist so much in any principle of the law of nations, as in relation to the inevitable, and sometimes wanton abuses that have been practised under it, to our insufferable wrong and injury. We have the authority at least of one British statesman, for saying, that from the similarity between the people of the two nations, it is impossible to exercise this power without abuses so dangerous to the harmony desirable to both, that it is better for England to give up the inconsiderable benefits she might derive from it, than to keep up disputes and irritations, which grow out of the abuse of it, and constantly endanger the peace of the countries.

The desire and endeavours of the American Government, to suppress by treaty and contract, *privateering* as a legitimate mode of warfare, falls under the severe censure of the critic ; it is called a novel "doctrine;" it is a part of our new maritime code, as if we were asserting it as a principle of the "established law of nations." Here is a very uncandid and absurd misrepresentation of the whole affair. This is not the occasion to discuss the question of the policy or morality of this species of warfare. The Reviewer doubtless knows, that learned and enlightened jurists have condemned it as being, at once, immoral and impolitic. Assuredly, it is liable to strong objections on both grounds. It is placing a business in the hands of individuals, to be pursued for their own gain, and very much at their own discretion, which properly belongs to national hands and national objects. Abuses of this power must ensue ; and outrages have frequently been committed by privateers, which national ships could not have committed. Vessels of war of this description now bear the softened denomination of "*privateers*;" but in past times they were called *freebooters*, and even *pirates*. It is true, they bear commissions from their governments ; but it nevertheless is true, that they are not, and cannot be under the same discipline and control as national ships, commanded by national officers, directly and severely responsible to the Government for any misconduct or violation of duty. These topics may not now be dilated ; it is enough for our present purpose to say, that on this subject, the United States have put forth no "claims of an unreasonable nature;" nor of any kind; no "extravagant pretensions"—or "new doctrines;" nor offered a "new code of maritime law."—When and where has the American Government advanced as a principle of the maritime law, that "belligerents should abstain from

commissioning privateers?"—when such an assertion was made by a Journal having much authority in its own country, and respected every where, it should have produced the proof, or been ready to do so. If we have introduced this restriction in treaties already made with independent governments, and professed our willingness to do the same with others, as a matter of mutual agreement, can it be said, with any propriety, that we are putting forth pretensions, or advancing new doctrines of national law?—Are we chargeable with a "frigid and exacting temper," particularly towards Great Britain, for proposing such a compact to her; which she is at full liberty to receive or reject at her pleasure? A moment's reflection must satisfy the most prejudiced, that, on this subject, at least, self-interest has not predominated; and that if there be an error in proposing to abolish privateering, it is because our interest is directly opposed to the measure. Our national navy being small, in comparison with those of Europe, it is important that we should obtain force on the Ocean from every source in our power; particularly for the annoyance of the commerce of the enemy. For this purpose, none is more effectual than privateering. It has always been a most formidable engine of war in our hands; we have peculiar facilities for employing it; and, if self-interest governed the question, we would never consent to abandon it.

The Reviewer slightly touches some questions now under negotiation between our governments; such as the *boundary line*; our claim to *Columbia river*, &c. which we shall leave to be settled by the proper authorities, who will not be much enlightened by any thing the critic has said, or we could say, concerning them.

As he proceeds with his subject, the liberality with which he commenced his labours, seems to be entirely exhausted. He falls into all the absurd and vulgar slang which characterizes the opinions and language of an English Journalist, when he speaks of the United States. Our "stupid Germans;" our political parties; whiskey elections; licentiousness of the press; all furnish gratifying topics of contempt and reproach; as if such things are entirely unknown in Great Britain. In spite of himself, the Reviewer, in composing his article, had been compelled to contemplate the increasing importance and strength, wealth, resources and improvements of these United States; to look at the glowing and undisturbed happiness of the people, living in ease, plenty and safety; and to compare their condition with the starving and squalid misery that is devouring a large portion of the British empire. The "*London Times*" has just informed us, that "a paper has been printed, by order of the House of Commons, which exhibits but a melancholy picture of poverty in the lower

orders of the English nation." This paper is a return of the funds levied by parishes under the poor rate system for the year ending in March 1827. It is with grief, and "no slight alarm," the Editor finds the poor rate, during that year, amounted to nearly *eight millions of pounds sterling*; and this in the thirteenth year of peace; and that the increase since the preceding year, was *seven hundred thousand pounds*. Now all the travellers and journals of the "United Kingdom" may combine their zeal and labours to calumniate this country, by picking up private scandal in ale-houses, and heaping ridicule and contempt upon our public character and institutions; on our President, Congress, Courts, and Elections, and we will rest the comparison of our national prosperity and happiness on the single fact above mentioned. To reproach us with the licentiousness of our elections and press, is really an effort of audacity we did not expect. What is so gross, so turbulent, so openly corrupt, as an English election? Our "Congress candidates" have no such "serious ordeals to go through," as peltings with mud and stones; spitting in their faces, and compelling them to save their limbs and life, by flight and concealment.

The pious Reviewer deploras the state of religion in the United States, and our want of a National Church. We thank him for his concern, so far as it is sincere. We are, however, content, without such an establishment; we get along without it, pretty well, in this world, and hope we shall not feel the loss of it in the next. The persecuting and malignant animosities produced in Great Britain, by this ecclesiastical pre-eminence, offer no encouragement to us to adopt it. We even imagine, that the good will, equality, and harmony that subsist here, among the various sects of Christians, are a recommendation to the whole system, and present the character of our religion in its true purity and beauty.

The Reviewer surpasses all preceding effrontery, in asserting, that "the Court is as low as it possibly can be, and the Bar not much higher." The refutation of this calumny, at large, would require more time than can now be given to it. An occasion may, and ought to be taken, in a review of Mr. Brougham's late speech on the administration of the law in England, to show how many of the evils and abuses complained of, have already received correction and amendment in the United States; in part by our legislatures, but more by the Courts and Bar. There is not a Court on earth of more learning, intelligence, independence, purity, and industry, than the Supreme Court of the United States. The Superior Courts of the several states are also entitled to the highest respect; and the subordinate tribunals, generally, afford no ground of complaint. The volumes of Reports issued from our Courts, will altogether satisfy any lawyer, ca-

pable of appreciating them, of the ability of our Judges, and of our Bar ; and we securely commit their reputation to their works. That some changes in the organization of the federal Courts might be beneficially made, as is suggested by Mr. Adams, is, we think, true ; but they are required by the immense increase and extension of our population, and not from any opinion entertained by Mr. Adams, or by any body, that "the Bench is as low as it possibly can be," or that it needs any improvement in the character or qualification of the Judges. Nothing was ever more uncandid, or pitiful, than the indistinct reference to Mr. Adams's suggestion, as if it would support the accusation against our Courts.

We now take our leave of the Reviewer, without any feeling of hostility to him, or his country, beyond the fair limits of a warranted self-defence ; which, we think, no American should ever surrender to the arrogance of an adversary, or decline, from diffidence or indifference. We have pleasure in repeating, that, on many subjects treated in this article, we find more liberality and intelligence ; more knowledge of the real condition of our country, than has ever before been exhibited in the "*London Quarterly*."

ART. X.—*Narrative of an attempt to reach the North Pole, in boats fitted for the purpose, and attached to His Majesty's Ship Hecla, in the year 1827, under the command of Captain WILLIAM EDWARD PARRY, R. N., F. R. S., and honorary member of the Imperial Academy of Sciences at St. Petersburg. Illustrated by Plates and Charts. Published by authority of His Royal Highness, the Lord High Admiral.* London : 1 vol. 4to. pp. 229. 1828.

THERE has been no geographical problem more interesting, since that which led to the discovery of the continent we inhabit, than the discovery of a passage from the Atlantic to the Pacific Ocean, along the northern coast of America, or a passage over the pole.

Malte Brun justly asks, "Is not geography the sister and rival of history?" The importance of this branch of learning has been acknowledged in all ages, and so vigorously have discoveries been pushed, within the last three or four hundred years, that we are now left but with one point, if we except part of Africa, and the islands off the Antarctic Sea, whither to direct our attention. The great and rapid discoveries made in this science within sixty years, have contributed much to physical science. Ex-

peditions to the polar regions, have added very many new objects in Natural History, and thrown much light on magnetism, which has been recently proved to be nearly allied to electricity. Important observations have also been made on various atmospheric phenomena.

The author we have just quoted, with truth says: "These voyages have expanded the bounds of geographical knowledge, added greatly to the resources of the whale fishery, and above all, they have thrown a new splendour over the nautical glories of Great Britain, and enhanced the dignity and value of human nature. They have proved that man, enlightened by the arts, is more than a match for the obstacles of nature, in her wildest ferocity."

On entering into an investigation of discoveries to the North, we are naturally led to the consideration of the voyages made at an early period, which had the remotest relation to those which subsequently took place. The hardy and adventurous sailors of Scandinavia, a country now known under the names of Denmark, Norway, and Sweden, first carried their researches to the northward. A pirate, of this nation, by the name of Naddodd, pursuing his profession, which was actually regarded as honourable among his countrymen, was, perhaps, the first who made discoveries within the Arctic Circle. In the 9th century, about 861, while in pursuit of plunder, he was driven, by continued storms from the east, upon an uninhabited coast, which, from the quantity of snow visible on its mountains, he called *Schneeland*, (Snowland.) Fourteen years afterwards, this country was visited by a Swede, named Flocke, who, it is said, carried out ravens with him, which, when he approached that part of the ocean where the island lies, he set at liberty, and by their flight, was directed in his course to the land. To this country he gave the name of Iceland, which it has retained ever since that time. The Icelandic Chronicles mention, that wooden crosses, and some other pieces of workmanship, supposed to be British and Irish, were found there by the Norwegians, which, if true, would prove it to have been visited previously to 861. The activity and energy of the settlers soon enabled them to carry their commerce to most parts of the north of Europe, and the island became celebrated for its learning; and the geography, as well as the history of the North, is much indebted to its writers.

Forster informs us, that about the middle, or near the end of the tenth century, Gunbiorn, a Colonist, discovered an extensive country to the west of Iceland, which was a few years afterwards visited by Eric Rauda, who had fled from justice in Norway, to Iceland. After spending part of three years in exploring it, he returned to Iceland, where he gave a most extravagant account of the country, and called it Greenland. Soon after-

wards, A. D. 986, a respectable colony was settled here, and from this period we may very properly date the first settlement in America. This interesting colony increased rapidly, and was situated on the eastern coast; sixteen churches, and two convents had been erected. Barrow says there were twelve parishes, one hundred and ninety villages, one bishop's see, and two convents, when, in the early part of the fifteenth century, all communication was cut off by an accumulation of ice upon the shores, which extended, perennial, to a considerable distance. In 1406, the seventeenth bishop made an attempt to reach his see; but this frozen region, to which Virgil's line,

"Cerulea glacie concretæ atque imbribus atris,"

may well be applied, repelled his attempts to land, by an effectual barrier of ice. From this period to the present time, a veil of obscurity hangs over this severed and truly interesting colony. The sympathies of the inhabitants of more happy climes have been actively excited to their relief, but all the vessels which have attempted to approach the eastern coast, were compelled to return without being able to make a landing. An Iceland bishop, it is said, about the middle of the sixteenth century, was driven so near to the coast, as to be able to perceive the inhabitants driving their cattle through the fields. There is, however, much reason to believe, that long before this period, the rigours of the climate, the want of supplies from Europe, and the natural enmity of the Esquimaux, had placed them beyond the reach of succour. Capt. Scoresby, however, an active and intelligent commander of a whaler, is disposed to think, from the view he got a few years since, while on a fishing voyage, that the descendants of the colonists still inhabit it.

That Greenland is separated from the continent, by arms of the sea, there cannot now be a doubt. But whether it be an island no larger than it is already known, or whether it stretch towards the pole, and occupy a space rendering it worthy of the title or name of continent, it must still be considered as part of America. If this be admitted, the discovery of America should bear date from A. D. 970, being the year that Gunbiorn discovered Greenland.

Kerr, in his excellent *Collection of Voyages and Travels*, places the discovery of America in the year 1001.

"An Icelander," he says, "in search of his father, who was in Greenland, was carried to the south by a violent wind. Land was discovered at a distance, flat, low, and woody. He did not go on shore, but returned. His account induced a Norwegian nobleman to fit out a ship to explore this new land; after sailing for some time they discovered a flat shore, without verdure: and soon after, a low land covered with wood. Two days' prosperous sailing brought them to a third shore, on the north of which lay an island. They entered, and sailed up a river, and landed. Pleased with the temperature of the climate, the apparent fertility of the soil, and the abundance of fish in the rivers, they resolved to

pass the winter in this country; and they gave it the name of Vinland, from the quantity of small grapes which they found growing. A colony was soon after formed, who traded with the natives: these are represented as of a diminutive stature, of the same race as the inhabitants of the west part of Greenland, and as using leathern canoes. It appears from the Icelandic chronicles, that a regular trade was established between this country and Norway, and that dried grapes, or raisins, were among the exports. In the year 1121, a Bishop went from Greenland for the purpose of converting the colonists of Vinland to the Christian religion. After this period there is no information regarding this country. This inattention to the new colony probably arose from the intercourse between the west of Greenland and Iceland having ceased, as we have already mentioned, and from the Northern Nations having been, about this period, wasted by a pestilence, and weakened and distracted by feuds. Of the certainty of the discovery there can be no doubt. The Icelandic chronicles are full and minute, not only respecting it, but also respecting the transactions which took place among the colonists, and between them and the natives. Ordericus Vitalis, in his Ecclesiastical History, under the year 1098, reckons Vinland, along with Greenland, Iceland, and the Orkneys, as under the dominion of the king of Norway."

We are, therefore, irresistibly led to the conclusion, that the coast of Labrador, or the island of Newfoundland, was discovered and inhabited by Europeans, or their descendants, at the early period above mentioned. The discoverer of this part of America was a colonist, named Biorn—the first settler was Lief, son of Eric Rauda, who wintered about the lat. 50° N. with 35 men, and Biorn as pilot, in or about the year 1003. Thorwald, the brother of Lief, afterwards pursued the discoveries for two years without seeing an inhabitant. He afterwards, however, met with three leather boats, each with three Indians, whom he seized and wantonly murdered, with the exception of one, who escaped. Soon afterwards, the natives attacked Thorwald's vessel, when he was wounded by an arrow, which caused his death. The people were called Skrœllingers, signifying dwarfs, and were doubtless the same now known as the Esquimaux. Hackluyt has given a somewhat circumstantial account of the discovery of this continent by Madoc, in the year 1170. Having left Iceland far to the north, it is said he arrived at "a land unknown, where he saw many strange things."

Italy contributed much, by her bold, intelligent navigators, to early discoveries: but the results to her have been of a very unprofitable nature. We cannot refrain from quoting here the exclamation of old Purchas.

"Happie Italy, that first, in this last Age of the World, hath discovered the great discoverers of the World, to whom we owe our M. Paulus, Odoricus, Ver-tomannus, for the East; Columbus, Vespucius, Cabot, for the West: these noble Zeni for the North; and the first encompassing the worlds wide compasse, unto Pigafetta's Discourse, companion of Magellan in his iournie. Vnhappie Italy, that still hath beaten the bush, for other to catch the Bird, and hath inherited nothing in these Easterne or Western Worldes, excepting thy Catholike clayme."

John Vaz Costa Cortereal, in 1463, or '64, made an attempt to reach the East Indies by sailing to the westward, and, according to Barrow, arrived at Newfoundland.

The obscurity of these voyages, places in relief, the eminently successful ones of Columbus, whose genius and untiring perseverance, led him to the discovery of countries, enjoying the happiest climates in the world.

The fever of discovery seemed now to be epidemic throughout Europe. The Portuguese, Spanish, and English, took the lead in these expeditions. The former, under Diaz and Gama, boldly carried their vessels, first to the Cape of Good Hope, and then into the seas of India, while the Spaniards, in search of the same country, turned their faces towards the setting sun. Columbus, after a perilous voyage, was the first person, in his little fleet of barks, to see the land. This was one of the Bahamas, and now known by the name of "Cat Isle." Sebastian Cabot, a Venetian merchant, residing in London, sailed in 1497 in search of a passage to India, by the north-west, and it is said reached $67\frac{1}{2}^{\circ}$ N. lat. It is certain he visited Newfoundland, to which he gave the name of *Prima Vista*. The island of St. John, being discovered on St. John's day, he gave to it that name. Gaspar Corte-real, in 1500, discovered the river St. Lawrence. Having visited a considerable part of Labrador, he discovered a strait, probably that of Hudson, through which he imagined a passage to India would be found. To this he gave the name of the "*Straits of Anian*." In the following year he was lost, it is supposed, in the ice; and his brother Michael, in 1502, sailed in quest of him, but he perished, it is supposed, in the same manner. A third brother of this adventurous family wished to make a search for his lost brothers, but to this the king of Portugal refused his consent.

The early part of the 16th century, gave birth to new enterprises. The discovery of a passage to Cathay, or the East Indies, was the main-spring of all the attempts now made. It was the promised land, whence were to be drawn inexhaustible riches and resources. Columbus felt assured that the desired passage was to be effected within a short distance to the north of the equator, while other navigators sailed both to the north and south, with a view to the same object. After the voyage of Columbus, that of Magellan is among the most important. He sailed from Spain, in 1519, with five ships, and after passing the strait to which his name has been given, he made the first circumnavigation of the globe in 1124 days. One ship only returned to Spain, and it was drawn up and preserved as a monument of the first voyage round the world. Drake afterwards made this voyage in 1051 days, and the first navigator south of Terra del Fuego accomplished it in 749 days. It is said, a Scotch privateer, about the middle of last century, made it in 240 days.

Much of Magellan's success has been attributed to the greatest cosmographer of the times, Martin Behem. Pigafetta, who accompanied him, relates in his journal, that Magellan was in pos-

session of a chart of Behem, in which a strait was laid down communicating with the Pacific Ocean. The sole honour, however, of this discovery, has been, we think, ably and successfully claimed by the friends of Magellan. A few years after this important discovery, we are told by Purchas, that Stephen Gomes, a Spaniard or Portuguese, who had sailed with Magellan, elevated with hopes of new straits, set out in search of a "northerly passage," but being unsuccessful, he filled his ship with slaves and returned. The French, at this time, also engaged in discoveries to America. Francis I. in 1524, sent out Juan Verazzani, who followed the coast from Florida to Labrador, and gave the name of New France to the country he discovered ; he did not, however, make a settlement. From this period, to 1536, several attempts were made by French and English navigators to discover the "Straits of Anian." The latter, this year turned their discoveries to some account, by engaging in the fisheries, which the former had already found profitable. They began now to take a decided lead in discoveries to the north. Sir Hugh Willoughby, in 1553, with Richard Chancellor as pilot-major of the fleet, set out to make discoveries to the north-east. Having passed North Cape, the vessels were separated. Willoughby, it is supposed, discovered Nova Zembla, and not being able to land in consequence of the shoalness of the coast, sailed for Lapland, where he attempted to winter, and unfortunately perished, with seventy persons, the crews of two of his ships. Chancellor, more fortunate, discovered the White Sea, and, wintering at Archangel, paid a visit to the Czar at Moscow, from whom he obtained certain privileges to trade.

Twenty-three years afterwards, Frobisher was sent in search of a North-West Passage. After fifteen years perseverance, he was enabled to obtain two small vessels of twenty-five and thirty tons, and a pinnacle of ten tons, with which he boldly encountered a dangerous icy sea. He entered a strait in lat. 63° to which he gave his own name, and which he thought separated America from Asia. This is now generally known by the name of Hudson's Strait, and is no doubt the same discovered by Cortereal, and supposed by him to be the "Straits of Anian." It is mentioned by Monsieur de la Mothe de Vayer, ("done out of French,") that Master Frobisher, in his second or third voyage, "met with a sand, glittering as if it were intermixed with Gold Oar ; they loaded three hundred tons of it in their vessels." The third voyage was made in 1578, with fifteen ships, and one hundred and twenty settlers. This last voyage was undertaken by Queen Elizabeth, with a view of gaining possession of *Meta-incognita*, or Greenland. This, like the other voyages, was abortive, the expedition having returned without effecting any thing of importance. Sir Humphrey Gilbert and his brother, in 1578, obtained from Elizabeth "a patent for making discoveries." The company

was incorporated under the name of "The Colleagues of the Fellowship for the Discoveries of the North-West Passage." The expedition, consisting of five vessels, set out in 1583 for Newfoundland—they were unsuccessful, and on their return were lost.

In 1585, an English Company of adventurers fitted out two ships of fifty and thirty-five tons, the command of which was given to Captain Davis. The spirit of adventure obtaining a new impulse, the attempt to penetrate Hudson's Bay was abandoned, and a more northerly course adopted. Passing the south point of Greenland, he gave it the name of "Land of Desolation." Having proceeded as far north as $66^{\circ} 40'$, or according to Purchas, $64^{\circ} 15'$; he discovered an island since known as Cumberland Island, to the south cape of which he gave the name of "Cape of God's Mercy." To the strait between this and Greenland he gave his own name. From this island he sailed west sixty leagues into the strait now known as Cumberland Strait; but meeting with "adverse winds and tides," he was compelled to return. In this voyage they saw many whales, but knew not the manner of taking them. The following year he sailed with four ships, but was unable to penetrate further than on the previous voyage. Still sustained with the hope of discoveries, the succeeding year he was again sent out for the third time by the same company, with three vessels. Sailing as before, up the west coast of Greenland, he advanced as far as $72^{\circ} 12'$, where, to use his own words, he found "the sea all open, the passage most probable, the execution easy." His efforts were, however, ineffectual, and he returned again to England. Soon after this, in 1592, a Spanish expedition was fitted out under the command of Juan de Fuca. He imagined he had discovered a communication from the west coast of America with the Atlantic. It was intended to follow up Davis's discoveries, but these intentions were frustrated; according to the excellent author of the Pilgrimage, "The Spanish Fleete and the vntimely death of Master Secretary Walsingham (the Epitome and Summarie of Humane worthinesse) hindered the prosecution of these tended discoueries."

The fabulous voyage of Maldonado in 1588, in which it has been stated he passed through the "Straits of Anian," would not be noticed here, but that it has recently, in some parts of Europe, excited some attention. There can be no doubt of its being spurious. Following in chronological order, we find three attempts made by William Barentz, towards a north-east passage. These were undertaken by the Dutch. The first voyage, 1594, he sailed to Nova Zembla as high as $77^{\circ} 25'$. The next year he sailed again to Nova Zembla, but the weather being "Misty, Melancholie and Snowie," they were compelled to return. In 1596, on the third voyage, Cherie Island and Spitzbergen were discovered, and they sailed as far as $80^{\circ} 11'$. They then steered south and

east, and doubled the northern extremity of Nova Zembla. On this island, distressed by the weather, they were compelled to pass a "cold, comfortlesse, darke and dreadful winter," in lat. 76° . The ship having been wrecked, in the spring they made two small boats of her remains, and having set sail, reached Lapland, at the distance of 1000 miles. During the voyage, Barentz and two of his companions died in the open boats.

In 1602, the English again sent out an expedition to make discoveries. Two "fie boats" under the command of Captain Waymouth, penetrated one hundred leagues into Hudson's Strait, but the crew having mutinied, he was obliged to return. Shortly after this, three voyages by Hall, and one by Knight, were performed, but without success. They both eventually lost their lives in an affair with the natives.

Numerous as had been the failures, a society of Merchants, in 1607, determined to send out Henry Hudson, a most skilful and experienced seaman. He sailed for the east coast of Greenland, which he made in 73° north latitude, and gave to this part of the coast the name of "Hold with Hope." Pursuing his voyage to the north, he attained, it is said, the parallel of 82° , where meeting with much ice, he was compelled to return. In latitude 78° , he found warm weather, an open sea, and much drift-wood. A second voyage was made the following year, and a passage between Spitzbergen and Nova Zembla attempted. His third voyage was undertaken for the Dutch in 1609. In this voyage he first sailed to the eastward of North Cape, and then westward towards Newfoundland. Falling in with the Continent of America, he coasted it to the southward. On this occasion he discovered that noble river, since known by his name. His fourth and last voyage was made in the following year, from England, in the service of the Russian company of England, in a vessel of fifty-five tons. In this small hull he pushed through the strait, which now is called Hudson's Strait, but which he called Wolstenholme and Digges, and passed into the bay, or rather sea, at present known as Hudson's Bay. In the southern part of this, unprepared as he was, he determined to winter. Scantly supplied with provisions, they were fortunate in taking an immense quantity of white partridges,—about one hundred and twenty dozen. "These left them at the spring, and other succeeded in their place, swan, goose, teale, ducke, all easie to take," and "at the opening of the yeare there came to his ship's side, such abundance of all sorts of fish, that they might therewith have fraught themselves for their returne." Soon after the ice permitted their recommencing operations, a mutiny, headed by a person by the name of Green, and whom Hudson had treated as his own child, broke out, fatally for this worthy commander, who was forced with his son and some others, into a small boat, with few provisions and

amid fields of ice. In this boat they must have perished, never having been heard of after. Green and three others of the mutineers, shortly afterwards, were overtaken with a just retribution, in being killed by some of the natives. The remainder of the crew returned home, in a miserable condition, having been compelled to live on sea weeds, fried with candle ends, &c. Humanity required that an effort should be made in favour of the deserted Hudson and his companions, and Sir Thomas Button was sent out in 1612, to search for the lost commander, as well as to make discoveries. Sir Thomas wintered at Nelson's river in 57° , where the Hudson's Bay Company have now their principal establishment. They suffered much here, from hunger and cold, notwithstanding it is said they killed 1800 dozen white partridges. In the following spring he made extensive examinations round this bay. Near Digges' Island, "hee found the comming in of the great and strong tide from the North-West, which feedes both these huge Bayes and leaves great assurance of nothing now left, but a little sayling to the North-West for the finding of that passage; or reason to looke no further for it."

Soon after this period, several voyages took place, the results of which were unimportant. Gibbons, in 1614, went out in the *Discovery*, and soon returned, without effecting any thing; and, in the following year, Bylot, who had been with Hudson, Button, and Gibbons, accompanied by the celebrated Baffin as mate, attempted further discoveries in Hudson's Bay, but was not successful. In the following year, Bylot again set sail, and Baffin accompanied him, in the capacity of pilot. They were still in the *Discovery*, of fifty-five tons, this being her fifth voyage to these dangerous seas. Baffin, with great confidence, carried his little bark through Davis's Strait, as high as 78° . They found here an extensive sheet of water, to which they gave the name of Baffin's Bay; and, having coasted its northern boundary, they stood to the southward. During this investigation of the coast, they passed a Cape, which they called Cape Dudley Digges. They also passed Whale Sound and Sir Thomas Smith's Sound; the latter they reported to be choked up, not with ice, but whales. In 70° , he discovered Sir James Lancaster's Sound, since rendered so famous by the failure of Ross, and success of Parry. This voyage is one of the most remarkable in the history of navigation. Baffin's discoveries, until confirmed by Ross and Parry, after a lapse of two hundred years, were considered by most persons as fabulous. In latitude $70^{\circ} 20'$, Baffin anchored in a "fair sound," where they remained two days, but could obtain no intercourse with the natives, who fled at their approach. This should not surprise an European; for the pledged faith of the strangers was frequently broken, and the natives carried off

by navigators to Europe, against their inclination, and thus were severed from all the ties that make this life desirable.

"The shiv'ring tenant of the frozen zone,
Boldly proclaims the happiest spot his own."

In latitude $73^{\circ} 45'$, they landed at some islands, where they bartered beads, iron, &c. for skins, tusks of sea horses, &c. with some of the natives. After endeavouring, in vain, in many places, to find a passage to the westward, and finding the ice to accumulate, Baffin determined, towards the last of July, to return. He put into Cockin Sound, Greenland, to recover the health of his crew, which suffered severely from that scourge of seamen, the scurvy. They collected here, plenty of scurvy-grass, which they boiled in beer, and the sick were cured in eight days. We cannot refrain from pausing here, to reflect on the improvements in medical science, as well as the arts appertaining to navigation. This pestilence of navigation has almost deserted its ancient dominions, since the discovery of the concentration of anti-scorbutics; which, being now extremely portable and cheap, leave a commander no longer an excuse for having a sick crew.

In this voyage of Baffin, one circumstance strikes us, as extremely important to the navigation of these Northern Seas. He sailed from Gravesend on the 26th of March 1616; and was as high up Davis's Strait, about the middle of May, as $70^{\circ} 20'$. He had much time, during the months of June and July, to make discoveries, and was but little impeded by the ice. On the 30th of May, he reached Hope Sanderson; and subsequently left Greenland, on his return, on the 6th of August. This example of an early setting out, we fear has been neglected by modern voyagers. Captain Parry, on his first voyage, did not pass the Orkneys until the 20th of May; and on the 15th of June, had a very distant view of Cape Farewell:—it was not until the latter part of July, he obtained 73° north latitude, about the entrance of Sir James Lancaster's Sound. This Baffin effected nearly two months earlier in the year. An expedition, three years after Baffin's, was fitted out by the Dutch, under Jens Munk, who wintered in Hudson's Bay; where, out of a crew of sixty-four men, all died, it is said, of the scurvy, but Munk and two others. He discovered the Gulf called "The Welcome" by the English navigators, which he named Mare Christaneum. Luke Fox, self-styled "North-West Fox," persuaded Charles I. "of the ease and certainty of the passage round the northern part of America." The king fitted him out in one of his own ships, and gave him a letter "to his brother, the Emperor of Japan." Having passed into Hudson's Bay, he made the land in $64^{\circ} 10'$, which he called "Sir Thomas Roe's Welcome," and asserted, if any passage existed, it was by this island. The ex-

trement point which he reached, was $66^{\circ} 47'$, to which he gave the name of "Fox's Furthest." In this year, Captain James made a voyage to the same quarter. He wintered in latitude $52^{\circ} 3'$, where he and his companions suffered much from extreme cold, hunger, and disease. He gave the name of "James' Bay" to that part of Hudson's Bay where he passed the winter.

The only voyage of any importance, during the remainder of this century, was undertaken in consequence of information received from a French settler in Canada, by the name of De Gronsseliers. He had previously travelled much through the country, and having heard of Hudson's Bay, determined to reach it by sea. During this voyage, he found some Englishmen, whom he defeated, and became master of the country. He returned to Quebec, with a quantity of valuable furs and English merchandise. Some accounts state that he found six miserable tenants of a hut, who had been left on shore by a vessel from Boston. The ice had accumulated so fast, that the vessel was driven from the shore, and the boat's crew were left to their dismal fate. De Gronsseliers afterwards went to Paris, from whence, meeting with disappointments, he departed for England, where he was introduced to Count Palatine Rupert, who induced the king to send out Captain Gillam with him. Having passed up Baffin's Bay to 75° , or as some accounts say, only to 70° , he returned, and sailing to the bottom of Hudson's Bay, wintered at Prince Rupert's River, where he built a stone fort, and called it Charles's Fort. Charles II., in the mean time, constituted "Prince Rupert and certain lords, knights, and merchants, a body corporate, known by the name of the governor and company of the adventurers of England, trading into Hudson's Bay." This charter was dated in 1669, and the company, well known as the Hudson's Bay Company, enjoy a monopoly of the extensive trade in furs, &c. with a vast expanse of country, to this time.

The Company was bound by its charter to promote, and endeavour to make, discoveries to the north, and with a particular view to the north-west passage. This purpose, however, the Company has found more convenient to use its efforts to frustrate than foster. From the period of its charter to the time Captain Franklin undertook his first journey, the Company's officers seem to have thrown every obstacle in the way of discoveries, jealous of any participation in a trade they arrogated to themselves. At one period, a Captain Knight, who had been in the Company's service for a long time, informed his employers that it was their duty to prosecute discoveries to the north; and that he would, in case of denial, apply to the crown. To rid themselves of the importunities of an old man, eighty years of age, they sent him out with two ships, which never returned. Knight

carried out with him strong iron-bound chests, to carry the gold and copper which he was to collect. The whole crew must have perished in a most miserable manner, their bones having been discovered, some years afterwards, on Marble Island.

About this time, Catherine of Russia, to fulfil the designs of her late husband, resolved to send Behring, one of the most experienced men in her navy, to ascertain if America and Asia joined. If separate, he was to endeavour to discover a passage which would lessen greatly the length of the voyage to India. A vessel was built in Kamtschatka for this purpose, and he sailed in 1728, with this, and a small vessel previously built at Ochotzk. The Czar had taken so strong an interest in this projected voyage, that he made out the instructions in his own hand.

In this voyage, Behring passed through the strait since known by his name, and reaching a cape in lat. $67^{\circ} 18'$, he concluded he had fulfilled his instructions. Returning to the south, he passed the strait again, without having a view of the opposite land, but from various indications believed it to be not far off. Sanguine of success, Behring took a second voyage, in 1740, from Kamtschatka, and was accompanied by Tchirikoff, a captain of the Russian navy. During this voyage, he discovered the American coast, in $54\frac{1}{2}^{\circ}$, and, on his return, was wrecked on a desert island, where he had a miserable lingering death. From the sides of the cave which he inhabited, the sand washed down and covered his legs, and after being several times removed, he ordered his followers to let it accumulate, as it seemed in some measure to keep him warm. After he died, it was necessary to disinter him, in order to give him a decent burial. The crew made a small boat of the fragments of their wreck, and returned to the harbour of Peter and Paul.

An enthusiastic Irish gentleman, by the name of Dobbs, in 1737, induced the Hudson's Bay Company to send out another expedition, which reached only $62^{\circ} 30'$, and ascertained that the tides came from the north, and rose ten or twelve feet. This seems to have been the only thing noticed, worthy of attention, in this voyage. Satisfied of the insincerity and misconduct of the company, Dobbs induced the government to send out two vessels, the *Furnace* and *Discovery*, of which the command was given to Captain Middleton of the navy. Having sailed in 1741, he wintered in Churchill river, and the following year made some examinations of Repulse Bay, and returned. Dobbs, assured from Captain Middleton's own statements of his faithlessness, accused him of taking a bribe of 5000 pounds from his old employers, the Hudson's Bay Company, and his officers bore testimony to his having misrepresented facts. Parry has, however, in his second voyage, corroborated most of the statements of this commander. With a view to encourage private enterprise, Par-

liament, the following year, passed an act, offering a reward of 20,000 pounds to any one who should discover a north-west passage.

After this, a subscription of 10,000 pounds, in shares of 100 pounds each, was immediately raised, to fit out two ships, the *Dobbs* and the *California*, the command of which was given to Captains Moor and Smith. They left England in May 1746, and having arrived in Hudson's Bay, the *Dobbs* ran aground on the flats of Hayne's river. "In this distressed situation, the governor of the Hudson's Bay Company had the inhumanity to order the beacon to be cut down, that the captain of the *Dobbs* might be still more at a loss how to proceed, should the ship be got afloat." The ship was subsequently secured by the aid of her consort. Having proceeded to the north, many valuable observations on the currents, tides, and magnetic influence, were made. The ships then sailed to the south, and wintered in Port Nelson, where they were watched with great jealousy by the Hudson's Bay Company. On the 1st July they again stood to the north, and after examining Wager Strait, &c. they returned to England. This expedition had excited great interest and expectation in Europe, and its failure seemed to satisfy every one, that a passage for any useful purpose would never be discovered. These expectations nevertheless revived in the New World. Seven years after the return of the last expedition, that is in 1753, an expedition was fitted out from Philadelphia, then the capital of the province of Pennsylvania, and justly known for its commercial enterprise. This attempt was made at the expense of a number of gentlemen, who were desirous of seeing the north-west passage accomplished. The schooner *Argo* was prepared for this service, and the command given to a Captain Swaine, who set sail on the 4th March for Hudson's Bay. Having "touched at the Hiannas, near Cape Cod, and at Portsmouth, in New England, to take in her complement of hands," &c. she took her departure from the latter place on the 15th April. Satisfied that the particulars of this voyage will prove interesting to all American readers, we extract the description of it published in the *Pennsylvania Gazette*, November 15th, 1753.

"Sunday last arrived here the Schooner *Argo*, Captain Charles Swaine, who sail'd from this port last spring on the discovery of a North West passage. She fell in with the ice off (cape) Farewell; left the Eastern ice, and fell in with the Western ice in lat. 58, and cruised to the Northward to lat. 63 to clear it, but could not, it then extending to the Eastward. On her return to the Southward, she met with two Danish ships, bound to Ball River and Disco up Davis's Straits, who had been in the ice fourteen days off Farewell, and had then stood to Westward, and assured the Commander that the ice was fast to the shore all above Hudson's Straits to the distance of forty leagues out, and that there had not been such a severe winter as the last these 24 years that they had used that trade; they had been nine weeks from Copenhagen. The *Argo*, finding she could not get round the ice, pressed through it, and got into the Strait's Mouth the 26th of

June and made the island Resolution, but was forced out by vast quantities of driving ice, and got into a clear sea the 1st of July. On the 14th, cruising the ice for an opening to get in again, she met 4 sail of Hudson's Bay ships, endeavouring to get in, and continued with them till the 19th, when they parted in thick weather, which continued to the 7th of August in lat. 62 and a half, the Hudson's Bay men supposed themselves 40 leagues from the Western land. The *Argo* ran down the ice from 63 to 57° 30', and, after repeated attempts to enter the Straits in vain, as the season for discovery on the Western side of the Bay was over, she went on the Labrador coast, and discovered it plainly from 56 to 65, finding no less than six inlets, to the heads of all which they went, and of which we hear they have made a very good chart, and have a better account of the Country, its soil, produce, &c. than has hitherto been published. The Captain says 'tis much like Norway, and that there is no communication with Hudson's Bay through Labrador where one has been heretofore imagined, a high ridge of mountains running North and South about 50 leagues within the coast. In one of the harbours they found a deserted wooden house with a brick chimney which had been built by some English, as appeared by sundry things they left behind : and afterwards in another harbour they met Captain Goff in a *Snow* from London, who informed, that the same *Snow* had been there last year, and landed some of the Moravian Brethren, who had built that house, but the natives having decoy'd the then Captain of the *Snow*, and 5 or 6 of his hands in their boat round a point of land at a distance from the *Snow*, under pretence of trade, and carry'd them all off (they having gone imprudently without arms) the *Snow* after waiting 16 days without hearing of them went home, and was obliged to take away the Moravians to help to work the vessel. Part of her business this year was to enquire after these men. Captain Swaine discovered a fine fishing bank, which lies but six leagues off the coast, and extends from lat. 57 to 54, supposed to be the same hinted at in Captain Davis's second voyage. No bad accident happen'd to the vessel, and the men kept in perfect health during the whole voyage, and returned all well."

Not satisfied with the results of this attempt, Captain Swaine again sailed in the *Argo*, in the following spring. After much search, we are enabled to find only the following notice of this voyage. The *Pennsylvania Journal and Weekly Advertiser*, of Thursday, October 24th, 1754, published in Philadelphia, says : "On Thursday last arrived here the schooner *Argo*, Captain Swaine, who was fitted out in the spring, on a discovery of a north-west passage, but having three of his men killed by the Indians on the Labrador coast, returned without success."

The appetite for making discoveries in the North, after so many unsuccessful attempts, seems to have been satiated, and voyages of this description sunk, for a time, into almost total neglect. The Hudson's Bay Company, entirely unmindful of the conditions of their charter, anxiously endeavoured to frustrate the progress of geographical knowledge in that quarter of the globe, the proceeds of the whole trade of which they wished to empty into their own coffers. It has been remarked, with some severity, by a contemporary journal, that "after a lapse of a hundred years, they discovered that Chesterfield Inlet, at the distance of one hundred leagues from one of their establishments, was *not* the north-west passage." This momentous discovery was made by Captain Christopher, who examined it in the years 1761 and 1762, and found it to termi-

nate in a lake, after passing through a river. Seven years afterwards, Hearne was sent out by the company to Copper Mine river; the Indians having informed them that large quantities of copper might be found far to the west. After two unsuccessful efforts, he accomplished the journey from Prince of Wales' Fort. The object of this expedition was evidently the discovery of *copper*, and not the Polar Sea; for Mr. Hearne did not take time even to ascertain if he really had arrived at the sea. He found the water fresh, and judging from the water-marks on the ice, supposed the tide to rise and fall from twelve to fourteen feet. He imagined, however, he had reached the sea, judging from the quantity of seals observed on the ice, and the whalebone and seals' skins, found in the tents of the Esquimaux. But Mr. Hearne did not reach the sea. Capt. Franklin was satisfied, when he afterwards visited the mouth of the river, that Hearne had not approached nearer than within nine miles of its mouth. Capt. Franklin, who is a most accurate observer, found the rise and fall of the tide to be very small; four or five inches. This accords with most observations on the tides of the Polar Sea, which rarely rise and fall more than two feet. It requires an effort to believe, that after so many attempts by Mr. Hearne, and after his passing through all the perils and difficulties of such a journey, he should remain but about twenty-four hours at this interesting point; a point on which the foot of white man never trod before. We are unable to account for his proceedings in any way, but are inclined to believe, that much of the most important information was withheld from the world. He was selected for his knowledge in taking observations, and yet he informs us of but one, in the whole journey. This was at Congeathawhchaga, $68^{\circ} 46'$ north latitude, and about 3° from the mouth of the river. The chart gave it $73^{\circ} 30'$, but the best geographers of the time placed it in 69° , maugre the calculations of the Hudson's Bay Company's voyager. In this they showed their good judgment; as Captain Franklin's accurate observations placed it in $67^{\circ} 47' 50''$. It has been asserted, there were great discrepancies between the MSS. and printed accounts, which induced, at the time, doubts of his having reached the sea.

The Provinces of North America, interested in the discovery of the North-West Passage, had, as we have seen, sent out on two successive years, a vessel from Philadelphia. Notwithstanding the failure of those voyages, some gentlemen in Virginia, in 1772, fitted out a brig, called the *Diligence*, the command of which was given to a Capt. Wilder. On his return he reported, "that he reached a large bay, in latitude $69^{\circ} 11'$, which he supposed hitherto unknown; that from the course of the tides, he

thought it probable there might be a passage through it, but as this bay was seldom free from ice, the passage could seldom, if ever, be practicable." There cannot be a doubt but that Captain Wilder sailed through Davis's Strait into Baffin's Bay, and we regret much that our efforts to procure the particulars of this voyage have been fruitless. In 1768, the adventurous and able navigator, Cook, (then lieutenant,) was despatched to Otaheite, to take out Sir Joseph (then Mr.) Banks and Dr. Solander to observe the transit of Venus. Having returned in 1771, he was again sent, the following year, and during this second voyage, sailed further within the Antarctic Circle, than any navigator had done. These successful voyages inspired great confidence in this commander, and it was determined by the English government that he should be sent to the north-west part of America, there to endeavour to effect a passage from the westward to the eastward; in other words, to reverse the passage.

Parliament, about this time, passed a new Act, granting a reward of £20,000 to the discoverer of a passage by sea, to the north of the continent of America. This Act varied from that passed in the preceding reign, inasmuch as it permitted His Majesty's ships to claim the reward, as well as those of merchants, and granted a further reward of £5,000 to any ship approaching to within one degree of the North Pole.

In the third and last voyage of Cook, undertaken in 1778, with sanguine expectations of effecting this long sought for passage, which, like the water that surrounded Tantalus, seemed to vanish from the grasp of navigators at the moment they were about to seize it, he commenced his examinations of the North-West Coast, in latitude $44^{\circ} 33'$, and looked closely into all bays and inlets, with some expectation of finding an arm of the sea, leading into the Polar Sea, rendering it unnecessary to pass through Behring's Strait. Arriving, at length, at the most western part of the continent of America, the Commodore gave it the name of Cape Prince of Wales, and ascertained it to be in longitude, $191^{\circ} 45'$ east, and latitude $65^{\circ} 46'$ north. Being now fairly within Behring's Strait, which he found to be about thirteen leagues wide, and not twenty-eight, as stated by some writers, he continued northward, and discovered or named Point Mulgrave, Cape Lisburne, Icy Cape, &c. Being in latitude $70^{\circ} 44'$, on the 19th of August, he found himself "close to the edge of the ice, which was as compact as a wall, and appeared to be at least ten or twelve feet in height." Compelled by such a barrier to put about, he turned to the south, and named a low point of land, in $70^{\circ} 29'$, Icy Cape, which is the most northern yet known in this part of the Polar Sea. The depth along the icy barrier was found to be so small, as to induce them to be apprehensive lest they should get aground. We are not informed

whether this barrier was in motion or not. Subsequently to the death of Captain Cook, his successor, Captain Clarke, passed through the strait again, but could not get beyond $70^{\circ} 33'$.

About this time, Captain Pickersgill, who had been twice round the world with Cook, was sent to Baffin's Bay, with a view to make discoveries, and meet Cook, should he effect his passage, as well as to protect the whale-fishery. The choice of this commander was an unfortunate one in many respects, and nothing resulted of any importance from the voyage. The following year, Lieutenant Young superseded him in the command of the armed brig *Lion*, but returned with no better success.

Information having been obtained by the North-West Company, from an Indian, that a river in the interior, running to the north, fell into the sea, Mackenzie was despatched, in 1789, to find it, attended by a few of the natives. Passing through a desert and inhospitable country, he arrived at the mouth of the river, which he imagined here to disembogue into the sea. Many low islands were visible; to the largest of these, he gave the name of Whale Island, in latitude $69^{\circ} 10'$. Among numerous channels, he took one which was to lead him to Benahulla Toe, (White Man's Lake.) It is stated that the tide appeared to rise sixteen or eighteen inches, but we do not learn whether the water was salt or not, for our traveller seems to have had other objects in view, than to obtain a knowledge of the geography of this place. White whales (*delphinapterus Beluga*) were seen, he states, but we are not informed if any attempts were made, to ascertain if the party had really arrived at the Polar Sea, or not. His people could not refrain from expressing their regret, at being compelled to return, without reaching the sea. This year, the Spaniards also made an attempt to discover a navigable communication from the Pacific to the Atlantic, between the latitude of 53° and 60° . This expedition was under the orders of Malaspina, in the Corvettes *la Descubierta* and *l'Atrevida*, and was made "in order to discover the strait by which Laurent Ferer Maldonado was supposed to have passed in 1588, from the coast of Labrador to the Great Ocean," Nothing important appears to have resulted from this attempt. The voyage of Maldonado, mentioned before as spurious, has been believed in by some of the Spanish historians. But we ought to guard ourselves against all accounts not well authenticated. An Englishman, by the name of Cluny, has had the credit of making this passage, and his claim rests on the following ridiculous circumstance. He wrote a work called "The American Traveller," and, on his map, traced with dotted lines the coast, as it was supposed to lie, between Icy Cape and Repulse Bay. Along this line, he wrote, "here is supposed to be the North-West Passage." Vaugondy, geographer to the king of France, in a new map, thus rendered it into French. "Côte par

course par le Capitaine Cluny, auteur de l'American Traveller." In 1795, that indefatigable and able mariner, Vancouver, finished, after three years' labour, a very accurate survey of the coast, between the parallels of 30° and 60° , and established beyond a doubt, the non-existence of a passage there. This was one of the most complete surveys ever made of a coast, he having sailed into every inlet.

Mr. Dalrymple, hydrographer to the admiralty, with many other scientific men, satisfied of the existence of this desirable passage, still cherished a hope of its being effected; believing, on the authority of an old globe belonging to the library of the Inner Temple, and which, it is said, was among the first constructed in Great Britain, that a passage led from Davis's Strait, in about 79° , to the westward. This curious specimen of geographical science, contained all the discoveries of the early British navigators, as well as the Spanish and Portuguese; but, like many other relics of antiquity, it has been wrested from the gnawing hand of time, and more hastily and surely devoted to destruction. One of Mr. Arrowsmith's maps has been pasted over the discoveries of Frobisher, Davis, "the noble Zeni," and a host of other adventurous and hardy sons of the sea! In consequence of the representations of Mr. Dalrymple, Mr. Duncan, a master in the navy, a man of considerable experience, was appointed to take command of an expedition, which sailed in 1790, for Hudson's Bay, there to employ a sloop called the Churchill. On his arrival, he was told the vessel was unseaworthy, and could not be repaired on that station; and consequently he was obliged to return. Thus again, the withering hand of the company was instrumental in destroying an effort made to obtain a better knowledge of those dreary and inhospitable shores. Mr. Dalrymple subsequently ascertained, that this vessel was employed for twenty years after this period, by the company themselves. This gentleman, anxious to have the services of Mr. Duncan, induced him to take command of the ship Beaver, well prepared to encounter the perils of the northern seas. In her he sailed from the Thames, early in May 1791, but did not arrive at Churchill river, until the 5th of September! In the ensuing season, he entered Chesterfield Inlet, but was compelled to return, by the end of August, a mutiny having taken place in his crew, promoted, it is stated, by an officer, who was a servant of the company. Thus fell through, probably by the agency of this disinterested company, another of the vigorous efforts made by public men in England, where money seems to have been ever ready to be applied to useful discoveries.

In our chronological order, it becomes our duty to notice an adventure undertaken at the expense of Count Romanzoff. This nobleman, with great credit to himself, fitted out the ship Ru-

rick, the command of which he gave to Otto Von Kotzebue, a lieutenant in the Russian Imperial Navy. On the 27th of July 1816, the *Rurick* arrived off the island of St. Lawrence, near to the entrance of Behring's Strait. Here they had communication with the natives, who dwelt in tents made of whales' ribs, and covered with the skin of the morse; "each of them, (says Kotzebue,) embraced me, rubbed his nose hard against mine, and ended his caresses, by spitting on his hands, and wiping them several times over my face." Having passed the strait, they found the country north of Cape Prince of Wales, luxuriant and apparently well peopled. Every thing was green; snow only was to be seen on the tops of the mountains, and yet one had to dig but half a foot deep, to find frost and ice. On the 1st of August, they entered a broad inlet, in latitude $66^{\circ} 42' 30''$, longitude $164^{\circ} 12' 50''$, now known by the name of Kotzebue's Sound. Here our voyager believed he had found that entrance to the Frozen Sea, so anxiously sought for, by so many of his predecessors. After spending thirteen days in its examination, he was led to believe the only outlet was into Norton Sound. Our doubts of this, however, we shall explain hereafter. On the 15th, the *Rurick* set sail, and, with an open sea clear of ice, and the weather mild, we had every reason to expect an attempt to be made to double Cook's Icy Cape. Lieutenant Kotzebue, for some unaccountable reason, wished to visit the Asiatic shore, where he spent two most precious weeks, time by him never to be regained. Having returned through the strait, he wintered at one of the Coral Islands of the Pacific Ocean, and in the month of March, of the following year, again sailed to the northward. Unfortunately, about the middle of April, he was overtaken by a storm, in which he received a severe injury; and his health being affected, he returned home, without further efforts to accomplish an object so desirable, and which he had perhaps more within his reach, than any commander ever had.

Nearly thirty years had elapsed, since the abortive effort of Capt. Duncan to pass through Chesterfield Inlet; but the interest hitherto felt, still remained with scientific men in England. The government was solicited, in consequence of a Hamburg vessel, in 1817, having found the ice much removed from the East Coast of Greenland, to make new efforts. This ship sailed along the coast from the parallel of 70° to 80° , which had been supposed to be shut up for four hundred years. This remarkable circumstance, together with the fact of unusually large quantities of ice having been met with in the Atlantic, induced the idea that the present time afforded a rational hope of getting far to the northward and westward. From these considerations, Captain Ross was sent out on the 8th of April 1818, being appointed to the command of the expedition, consisting of the *Isabella* and *Alexander*.

Arriving at Cape Dudley Digges, April 18th, Captain Ross found the latitude to agree very nearly with that mentioned by Baffin. Numerous other observations completely corroborated the discoveries of that old and excellent navigator, which had almost been forgotten or denied, in consequence of not having been subsequently followed up. If we were asked what Captain Ross accomplished in this voyage, our answer would be, "almost nothing." He confirmed the observations made by Baffin just one hundred and ninety-eight years before, and gave to Lieut. Parry, the second in command, a view of that path, by following which he was the next year to reap a harvest of glory as well as a pecuniary reward, being the first gained under the several acts of parliament for polar navigation. Captain Ross, at the entrance of Sir James Lancaster's Sound, had eight hundred to nine hundred fathoms of water, and a clear sea to the westward. His bow was directed to that quarter, with his comrade in the rear; and every breast in both ships, beat anxiously in the hope of success, when suddenly and without any apparent reason, the commander, without a consultation of his officers, tacked his ship and returned home, greatly to their disappointment. Captain Ross stated he saw land in this quarter at a great distance, and that "the master and another" were on deck at the time!! He ought to have known, that vision in these northern regions is extremely deceptive, where fogs and clouds, which so often take the semblance of more substantial things, prevail in a great degree. Further, if all the eyes in the expedition rested on real land, which the captain thought he saw, it would still have been his duty to call his principal officers together, and to consult on the propriety of abandoning the expedition. This he did not do, and the wreath of glory which he had it in his power to win at this time, was plucked by his more able and adventurous companion.

The government, satisfied that Ross had resigned at the moment he ought to have prosecuted his discoveries, immediately prepared another expedition, the command of which was given to Captain Parry. Two ships, the *Hecla* and *Griper*, were admirably prepared for such an expedition, having every thing well suited to passing a winter in the Polar Sea. Early in May 1819, the ships left the Thames, and about the middle of July reached 73° north latitude. The Board of Longitude were ordered to adopt another scale of rewards, which were thus judiciously arranged: "To the first ship belonging to any of his majesty's subjects, or to his majesty, that shall proceed to the longitude of 110° west, or to the mouth of Hearne's or Copper Mine river, by sailing within the Arctic Circle, £5000; to 130° west, or to the Whale Island of Mackenzie, £10,000; to 150° west, by sailing westward, within the Arctic Circle, £15,000; to the Pacific Ocean by a north-west passage, £20,000."

In co-operation with this, a land expedition was fitted out under the command of Lieutenant (now Captain) Franklin, to proceed to the mouth of Copper Mine river, and thence to follow the coast to the eastward, in expectation of meeting with Parry, should he be able to sail round the north-east part of America.

Captain Parry, on the 30th of July, arrived at the entrance of Sir James Lancaster's Sound, precisely where Ross had unaccountably abandoned the prospect of success. Here he had, as Ross had, a clear sea; and sailing westward a little north of the 74th parallel of latitude, through an archipelago of islands, called by him the North Georgian Islands, among which he met with much ice, he was compelled to winter on Melville Island, in latitude $74^{\circ} 47' 19''$, longitude, $110^{\circ} 48' 29''$, where he remained ten months. The cold here was excessive, being, on the 15th of February, 55° below zero, and the mean temperature of the month 32° below zero. The mean temperature of the whole year was $1^{\circ} 33'$ above zero. We must not take space to dwell on even the important parts of these voyages, but cannot avoid giving here, an extract from Captain Parry's narrative, relating to an evident magnetic pole which he crossed.

"The latitude of the place of observation was $75^{\circ} 09' 23''$ and the longitude of the chronometers, $103^{\circ} 44' 37''$. The dip of the magnetic needle was $88^{\circ} 25' 58''$, and the variation was now found to have changed from $128^{\circ} 58'$ west, in the longitude of $91^{\circ} 48'$, when our last observations on shore had been made, to $165^{\circ} 50' 09''$ east at our present station; so that we had in sailing over the space included between these two meridians, crossed immediately to the northward of the magnetic pole, and had undoubtedly passed over one of those spots upon the globe, when the needle would have been found to vary 180° , or in other words, where its north pole would have pointed due south. This spot would, in all probability, at this time be somewhere not far from the meridian of 100° west of Greenwich."

In the vicinity of this meridian, the best and most delicate compasses were so sluggish as to be entirely useless in navigating the ships. It is a curious fact, that a writer in the *Quarterly Review*, two years previously, speaking of the extraordinary effect produced on the compass in Baffin's Bay, says, "the variation is so great indeed, as to lead to the belief that *one* of the magnetic poles must be situated in that quarter."

In the following year, August 15th, 1820, he reached latitude $113^{\circ} 57' 35''$, being Cape Dundas, the extreme western point which he was able to attain, and this entitled the discoverers to the reward of £5000. Arriving in England, every man was in health.

Agreeably to his instructions, Lieut. Franklin embarked at Gravesend, on the 23d of May, 1819, and after a tedious and dangerous passage, arrived at York Factory, on the 30th of August. Taking his departure on the 9th of the following month, he ascended Hayes's river to Lake Winnipeg, and thence pro-

ceeded up Churchill river. Crossing some hills, they embarked on Elk river, and descending that and Slave river, entered Slave lake, crossing which, they entered Yellow Knife river, and crossing many small lakes, descended Copper Mine river, and arrived at its mouth July 19, 1821, in latitude $67^{\circ} 47' 50''$, longitude $115^{\circ} 36' 49''$ W., a position differing greatly from that assigned to it by Hearne, who placed it in nearly 73° north latitude. Pursuing his discoveries to the east, along the coast, in two canoes, through rocks, and islands of ice, on the 16th of August he arrived at Cape Turnagain; an observation ten miles south of which, at their encampment, gave latitude $68^{\circ} 18' 50''$ north, longitude $109^{\circ} 25' 00''$ west, having sailed along the coast 555 geographic miles. Here it was found to trend to the N. N. E. and a more open sea was in view than he had seen since their departure from Copper Mine river. Being reduced to half a bagful of pemmican, and no longer having the least expectation of meeting with the Esquimaux, from whom they calculated to receive supplies, he found himself compelled, most reluctantly, to return.

Passing up Hood's river, Lieut. Franklin and part of his company reached Fort Enterprise, about the middle of October, in a most wretched, famished condition. Here they calculated upon finding provisions, &c. agreeably to previous arrangements with Mr. Wentzel, a servant of the company, and the Indians. These would have terminated all their miseries; but for reasons assigned, subsequently, by Mr. Wentzel, the fort had been left in the most destitute condition imaginable, and in their weakened condition, having subsisted on *tripe de roche*, a species of plant, which grows only far to the northward, and pieces of hides, leather, &c. with the thermometer at 15° and 20° below zero, it may well be imagined what anguish filled the breast of the worthy commander. After remaining in this wretched fort nearly four weeks, they were relieved by a party of Indians sent by Mr. Black, who had been despatched by Lieut. Franklin in search of them. November 16th, they left this place with the Indians, two out of the party of five in this fort having died. Having joined their companions at Fort Providence, they eventually, on the 14th July, 1822, terminated their journey, by arriving at York Factory. During this journey, they had the thermometer at 57° below zero.

Although this enterprise had been eminently successful, Captain Franklin was not able to obtain the point which he had hoped, the N. E. extremity of America. He obtained, however, the latitude and longitude of a considerable part of the coast, thus adding greatly to the stock of geographical knowledge.

In 1822, two Russian corvettes returned from an expedition through Behring's Strait, of the object of which we have not been

able to inform ourselves, a journal of the voyage not having, to our knowledge, been published. These ships sailed twenty or thirty miles north of Icy Cape, and the ice was seen "floating in not very great masses."

The admirable manner in which the whole voyage of Captain Parry in 1819 and 1820 was managed, his skill and perseverance having added so largely to the knowledge of the geography of the Polar Sea, induced the government without hesitation to fit out another expedition, the command of which was due to him. This attempt was to be made in a more southern latitude, and it was expected he would be able to double the north-east part of the continent, in a latitude where the season would be many weeks longer than that of Melville Island. The Board of Admiralty, sensible of the judgment shown in the conduct of Captain Parry during the last voyage, left much to his own discretion, and he set sail with the *Fury* and *Hecla*, accompanied by the *Nautilus* transport, April 29th, 1821. Having met with many obstructions from ice, winds, and fogs, he was unable to reach the Frozen Strait of Middleton until the 2d of August. Through this he passed into Repulse Bay, which he found clear of ice. The compass here is described as being extremely sluggish. It being necessary to repass Frozen Strait to get to the north, the ships struggled through it on the northern side, and having been carried to the south by the ice, captain Parry found himself, on the 3d September, driven to nearly the same spot where he had been on the 6th of August. After making minute surveys of the south-eastern point of Melville Peninsula for a month, it became necessary to go into winter quarters, and for this purpose an island near the south point of Melville Peninsula, where the coast begins to stretch to the north, was thought to present the most advantages. This was named Winter Island. By the middle of June the season was not quite so far advanced as it was at Melville Island, $8\frac{1}{2}^{\circ}$ further north, on their previous voyage:—the lowest temperature was 40° below zero.

Having remained here nine months, on the 2d July the ships were released from their icy chains, and proceeded to the northward, along the east coast of Melville Peninsula. In lat. 69° they found a strait, which they named "Strait of the *Fury* and *Hecla*," the entrance to which was completely closed by firm ice. Struggling here for sixty-five days, they advanced in the strait but forty miles to the westward! Owing to the rapid formation of the new ice, they were now compelled to look for winter quarters, and it was determined to make choice of the island of Igloodik, at the southern entrance of the strait, and the ships took their births on the 30th October. Here, as in their previous winter harbour, they met with the Esquimaux. These nomades, to whom the appellation of *periscii*, (a term used by ancient geographers to

distinguish the inhabitants of the frozen zone,) might well be applied, for their shadows in this latitude make a complete revolution of their bodies, afforded them a constant variety and never failing source of amusement. It was not until the 8th August in the following year, (1823,) that the *Fury* was liberated with great labour, and the *Hecla* four days after. During this winter the lowest degree of temperature was 45° below zero. Captain Parry, and his second in command, Captain Lyon, being confirmed in the opinion that any further efforts would be useless, and some symptoms of the scurvy being reported, determined to return to England, where both ships safely arrived, after an absence of twenty-seven months. The positive assurance that a passage cannot be accomplished through Hudson's Bay, or up Fox's Channel, was the principal result of this truly hazardous voyage.

The failure of Captain Parry's two preceding voyages, seemed to increase rather than diminish the interest taken in England in the accomplishment of the passage from the Atlantic to the Pacific Ocean. Encouraged by the partial success of Captain Franklin, on the coast of the northern part of America, the Lords Commissioners of the Admiralty ordered the *Hecla* and *Fury* to be made ready for another voyage to the Polar Sea, and Captain Parry was again appointed to the command. On the 19th May 1824, the two ships, with the *William Harris* transport, stood to sea, and it was not until the 26th August they entered Prince Regent Inlet, having dismissed the transport at the point at which Captain Parry's orders required him to commence his investigations. On the 1st October, the ships were gotten into their winter births at Port Bowen, in latitude $73^{\circ} 15'$, where they remained until the 20th July the following year, at which time they again set sail to the north. After being out about a month, contending almost constantly with the ice, the *Fury* was driven on shore by it and lost.

This misfortune caused Captain Parry most reluctantly to return, and he arrived off the Orkney islands on the 10th of October. In this voyage they penetrated into Prince Regent's Inlet as low down as $72^{\circ} 30'$ on the 23d August. While in this latitude, "much open water was seen" towards Cape Garry, but the loss of one of the ships compelled Captain Parry not to risk the other.

We have looked in vain, with anxious expectation, for the publication of the narratives of the recent expeditions of Captains Franklin and Beechey. Private letters, in lieu of this, give us an opportunity of stating some of their leading and interesting features. It seems almost obstinacy longer to doubt an easy entrance into the eastern part of the Polar Sea, after becoming acquainted with the voyages of these commanders. Captain Franklin, after descending Mackenzie's river, embarked on the 7th July 1826, in

two boats, built of mahogany for this purpose, and coasted the icy shore to the west as far as 150° west longitude. Here, on the 18th August, he was within 250 miles of Icy Cape. Captain Beechey, in the *Blossom*, agreeably to his instructions, passed through Behring's Strait as soon as the ice permitted, early in July of the same year, and after lying a few days in Kotzebue's Sound, proceeded round Icy Cape, and penetrated 120 miles beyond it. We are not informed on what day he attained this extreme eastern point, what obstructions he met with, nor how long he remained there. It is a very important and interesting fact, however, that the two commanders approached within a hundred and thirty miles of each other, and were probably both at their extreme points at the same period.

Having brought our sketch of the voyages for the discovery of "the North-West Passage unto Cathay and lands Orientall," in pretty correct chronological order, to the period of the expedition at the head of our article, we come naturally to the consideration of the currents, the ice, and relative position of the land, to the north of the continent of America. We feel no hesitation in declaring our belief in the existence of a passage from Behring's Strait through Prince Regent Inlet, into Baffin's Bay. Whether the vast accumulation of ice in this Polar region will permit passages to be made advantageous to commercial purposes, is doubtful. The extreme shortness of the season would render any accident fatal to a voyage to the East Indies. For the purpose, however, of trading in furs with the Indians and Esquimaux inhabiting the northern part of America, we see little reason why voyages round Icy Cape should not be almost as easily accomplished as round North Cape to the White Sea, in the same latitude. It has been universally admitted, that the latitude being the same, western coasts are more temperate; and the neighbouring continent gives us positive evidence of this. "The vegetation," says Chamisso, "in the interior of Kotzebue's Sound, is considerably higher (more advanced) than in the interior of St. Lawrence's Bay. The willows are higher, the grasses richer, all vegetation more juicy and stronger." Kotzebue, who had the command in this voyage, says, "ice and snow maintained their rule here, (in Asia,) since last year, and in this state we find the whole coast; while in America, even the summits of the highest mountains are free from snow; there the navigator sees the coast covered with a green carpet, while here, black massy rocks frown upon him, with snow and icicles."

Isothermal lines, drawn from this part of America, would incline much to south, making very oblique ones. While vegetation is green and flowery in Kotzebue's Sound, in $66^{\circ} 42' 30''$, desolation pervades the coast of Labrador, in 55° , and perpetual frost rules at 60° , on the east coast of Greenland. A determined

push to double the Icy Cape, could scarcely fail to be successful, unless the summer should be shorter and colder than usual.

Those navigators who have seen this cape, seem to have had little wish to sail to the east, or they had not instructions so to do. Captain Cook sailed to $70^{\circ} 41'$, where he found himself "close to the edge of the ice, which was as compact as a wall." He then returned to the south, and in $70^{\circ} 29'$, he saw a low point of land, which he called Icy Cape. He did not make the least effort to double this cape, for he says he afterwards got sight of the American coast in lat. $69^{\circ} 34'$. Kotzebue made no attempt at this point. He seems partially, (and very partially,) to have satisfied himself that the sound called after him, was connected with Norton Sound, and might perhaps branch to the Polar Sea. After spending thirteen days to convince himself of this, which he did not accomplish, instead of sailing round Icy Cape, as he might have done with ease, for he had mild weather and no ice, he sailed to the eastern coast of Asia, and finding there the climate too rigorous, he turned his prow to the south, and wintered among the coral islands, passing a mild instead of a frigid winter.

We have little information of the voyage of the two Russian corvettes, which returned from Behring's Strait in 1822. That jealous policy which has so often frustrated discoveries by foreigners in the north of Asia, and which influenced Catherine to arrest the geographical inquiries of our Ledyard, seems still to rule within the precincts of the Russian court. The scientific world is kept in ignorance of the object or results of this voyage. In a simple note written by Commodore Krusenstern, at St. Petersburg, dated 14th January 1823, he says, the ships remained four days near Icy Cape, and were twenty or thirty miles to the northward of it, and the ice was not floating in very great masses.

To us there is presented a difficulty not so easily surmounted, we fear, as the ice, we mean the shallowness of the sea, and this may be regarded with serious apprehensions. Behring's Strait has about twenty-five fathoms, and 4° further north, about midway between the two continents, we have but twenty-eight fathoms—north of Icy Cape twenty-two fathoms, and off Cape North, on the coast of Asia, twenty-five. Whether the sea deepens as it stretches to the north-east, remains yet to be proved.

For the discovery of the existence of a passage across this part of the Polar Sea, we feel assured the voyage has always been commenced where it ought to have terminated. The voyage should be made with, and not against the currents. There is much difference between stemming a current, surcharged with ice, and sailing or floating with it. Parry was six weeks making Melville Island, from the entrance of Sir James Lancaster's Sound, 600 miles, which on his return to the eastward was run in six days.

Captain Franklin sailed from Copper Mine river in two canoes to Point Turnagain, having coasted the shore for 555 geographic miles with little or no difficulty. This distance, in a direct line, would have taken him to the coast opposite Repulse Bay. We are yet without accurate observations on the force of the currents into and out of the Polar Sea. Kotzebue's calculations certainly seem to us to be extravagant. He supposed the current to pass northwardly through Behring's Strait at the rate of two miles per hour. This is more than double the rapidity mentioned by Cook. That the current flows perpetually to the north, through this strait, can no longer be doubted. The testimony of the two navigators mentioned above, as well as that of Clerke and Glottof, establishes the fact beyond contradiction. It has been stated that the commander of this Russian expedition, having passed round Icy Cape, was somewhat alarmed lest he should not be able to overcome the current in his return.

We hope we have satisfied the sceptical reader, that sailing round Icy Cape cannot be any very difficult undertaking, seeing that the ice does not appear to have impeded any navigator who has attempted it. Storms are not very frequent in these regions, rain is very rare, and snow does not often fall. The currents alone would carry a vessel from twenty-five to fifty miles in twenty-four hours to the eastward.

The immense accumulation of ice within the Arctic Circle, forming in many places perpetual mountains on land, and perpetual islands, in straits and bays,* and filling up bays, which might be more properly called seas, with one uninterrupted mass, during most part of the year, affords to the mind a perpetual source of interest. When it is remembered that Parry was confined in his winter quarters, at Melville Island, for ten months, a hasty glance at the subject would induce us to think that the ten months of excessive frost would soon conquer the remaining two months of spring, summer, and autumn, and embrace the whole in the arms of eternal ice.† The salt held in solution by the water of the sea, prevents perennial ice, even with the extreme cold experienced by Parry and Franklin. The experiments of Mr. Scoresby, on the congealing of water, are too interesting and important to pass unnoticed here. He says, part of the water which falls in spray over the deck, always remains unfrozen, which, on being tasted, is found to be highly

* "Two islands of ice have continued stationary for half a century, in the Bay of Disco. Dutch whalers have visited them, and have given them names." *Malte-Brun, from Olafsen's Voyage to Iceland.*

Capt. Wafer confessed he mistook islands of ice, five hundred feet high, for real islands. *Malte-Brun.*

† Scoresby calculates the dissolution of ice in the Spitzbergen Seas to be about 20,000 square leagues, annually, while the quantity formed in the seas navigated by whalers, is not more, probably, than one-fourth that area.

salt. "This arises from the freezing point of water falling in a certain ratio, according to the degree of saltness; thus, though pure water, of specific gravity 1.0000 freezes with a temperature of 32° , water of specific gravity 1.0263, containing about 54 ounces (avoirdupois) of salt, in every gallon of 231 cubic inches; that is, with the degree of saltness common to the Greenland sea, freezes at $28\frac{1}{2}^{\circ}$. Sea-water, concentrated by freezing, until it obtains the specific gravity of 1.1045, requires a temperature of $13\frac{3}{4}^{\circ}$, for its congelation, having its freezing point reduced $18\frac{1}{2}^{\circ}$ below that of pure water; and water saturated with sea-salt, remains liquid at a temperature of zero." *Scoresby's Arctic Regions*, vol. i. p. 231.

It can, therefore, be easily understood, that a permanent congelation of the Arctic Sea, or any large portion of it, cannot exist in the temperature with which we are at present acquainted. Indeed, Captain Parry says in his third voyage, he believed "Barrow's Strait was not permanently frozen during the winter." On land, in many parts of the frigid zone, however, the eternal ice holds its rigid sway. At the entrance of the Strait of the Fury and Hecla, where Capt. Parry passed the second winter, on his second voyage, the ice of the preceding year was not detached from the shores, when that of the new began to form. In the morasses, at the mouth of the Obi, one of the great rivers of Siberia, the ground, at the depth of a foot, is permanently frozen, and the same thing exists, we are told by Kotzebue, on the shores of Icy Cape. This commander also mentions a mountain of pure ice, "a real iceberg," in Kotzebue's Inlet, on which the party travelled some time, without knowing or suspecting its composition. Moss and grass covered it on every side but one, where cliffs of pure ice were to be seen. Upon further investigation, they found large quantities of mammoth teeth and bones in this ice.

It has been a matter of some doubt whether ice is ever formed at sea. The testimony of that accurate observer of the phenomena of the Arctic Sea, Captain Scoresby, we think conclusive on this subject. He observed it "from the first appearance of crystals, until the ice obtained a thickness of more than a foot." This was during the space of a month, and when the sea was free from exotic ice.

The icebergs, those monuments of frost and "wonders of the deep," majestically towering over the waves, and resisting the storms of the ocean, present to us an object worthy of contemplation. All navigators of the Arctic Ocean have gazed on these great natural curiosities with amazement. These huge masses are supposed to be avalanches, generated on land, and filling up valleys and recesses of mountains, down whose sides they are brought by torrents. This may be the case with the smaller

ones—the largest can only be formed by the sides of high perpendicular cliffs, whose base is washed by the sea. The accumulated mass of ages here, by its own gravity, overcoming the force of cohesion, falls with a tremendous crash into the deep, and these “thunder-bolts of snow” are carried, by currents, to the south.

It has been a matter of speculation, how large rocks, and other extraneous matter, could be placed on the icebergs. “I came,” says Fox, “by one piece of ice, higher than the rest, whereupon a stone was, of the contents of five or six tonne weight, with divers other smaller stones, and mud thereon.” Captain Parry says, “the quantity in which these substances, (stones, shells, sand, mud, weeds, &c.) here occurred, was really surprising, and puzzled us extremely to account for the manner in which they found their way upon the floes.” Rocks may be placed on masses of this kind in two ways. 1st. When an avalanche takes place from the side of a naked rock, large pieces, detached by the frost, would be carried away by the ice, and remain firmly attached to it. 2d. These icebergs often remain aground for years, and when removed from their moorings, by the rising of the waters, by the effect of storms, or by the diminution of their bulk, they are launched into the current, and their centre of gravity becoming changed by the detachment of considerable portions, from abrasion, their equilibrium is destroyed, and the summit may be inverted, and become the base.

Solar heat frequently acts upon their masses, and, by melting away the sides, portions fall into the sea, with a tremendous noise. This is technically called *calving*, and the crash is heard sometimes several miles. While it has this rolling motion, the mass sometimes falls to pieces “like a wreck.” The Straits of Hudson and Davis, Fox’s Channel, and Baffin’s Bay, are prolific nurseries of icebergs. Ellis saw one 500 or 600 yards in thickness, and Frobisher describes one to be “near four score fathoms above water.” Captain Ross mentions the almost incredible number of 700 being in sight at one time; some of these, too, were of an enormous size. One was aground in 150, and several together, in 250 fathoms. An accurate calculation of the dimension of one which was aground in 61 fathoms, was made by Lieutenant Parry, and was estimated to weigh 1,292,397,673 tons. It may be well to remark here, that the specific gravity of ice, being one-sixth less than water, one-seventh part of the whole bulk only appears above water.

It is a curious fact, that icebergs are rarely seen in the Spitzbergen seas; and, when seen, are universally small, although the northern part is in 80°. There is no approach to the pole, so easily and securely obtained, as by Spitzbergen. It is doubtful, however, if any one has ever approached to the 83d parallel of lati-

tude. The Hon. Daines Barrington, has taken infinite pains to collect accounts made by various whalers, which he read before the Royal Society. Agreeably to these statements, the latitudes of 83° , $83^{\circ} 50'$, 86° , 88° , 89° , and even $89^{\circ} 30'$, have been reached; but we agree with Captain Scoresby, a man of experience and observation, that little reliance can be placed upon relations of any voyages, beyond 81° or 82° . He says, none of the navigators, who had been sent expressly to explore the Polar regions, have been able to reach the parallel of 81° . The only approximation to the Pole, beyond 81° , which he thinks well established, was that made by his father, while he served as chief mate, when $81^{\circ} 30'$ was reached with great trouble and risk, being the only opportunity Captain Scoresby sen. ever had, during his numerous voyages, to advance so far. Captain Phipps, with all his efforts, was not able to approach nearer than $80^{\circ} 48'$. The persevering and able navigator Capt. Parry, however, in his last voyage, penetrated with his vessel to $81^{\circ} 5' 32''$, near to which parallel, having made previous preparations, he disembarked on the ice, and after having travelled thirty-five days to the north, was obliged to return, after attaining perhaps the greatest northern latitude, under which any human being had ever breathed, $82^{\circ} 45' 15''$. We ought not to pass here unnoticed, a most extraordinary expedition undertaken by that excellent officer Baron Wrangel. He proceeded from the mouth of the Kolyma to the northward, over the ice, and was stopped by an open sea free from ice or land in every direction. In a second attempt, a gale of wind broke up the ice, and he was tossed about on a small floe, which fortunately landed him at length, almost dead, on the coast of Asia, near Behring's Strait.

The currents of the Polar Basin, have excited the liveliest interest in those who have studied the geography of the Frigid Zone. All navigators of those seas, and particularly the more recent ones, have observed with considerable exactness their course and rapidity. We believe there is evidence enough, in the numerous voyages to the north, to sustain us in affirming, that the current which "rushes through Behring's Strait," passes over the pole, spreading itself partially to the right and left. On the left, it sweeps by North-East Cape, and brings down the ice to the east of Spitzbergen—to the right, after turning Icy Cape, it probably passes at no great distance from the northern coast of America, and finds an exit through Barrow's Strait and Prince Regent's Inlet, into Baffin's Bay, and through the Straits of the Fury and Hecla, into Fox's Channel. The principal part, however, of this current, passes to the south between the east coast of Greenland and Spitzbergen, bringing thousands of square leagues of ice with it every season, at the rate of five to twenty miles per day. Drift-wood is found in "considerable quantities,

in almost every part of the Greenland Sea." The shores of the island of Jan Mayen, and those of Spitzbergen, have annually immense deposits on them, and the bays of Iceland have sometimes been filled up with it. A few years since, the governor of Disco, a Danish settlement on the western coast of Greenland, had in his possession a mahogany table manufactured from a plank carried there by a current undoubtedly from the west. This mahogany must have grown on the west side of America, and within the tropics. A tree of logwood was also picked up, at no great distance from this place; and Admiral Lowenorn, on the east coast of Greenland, found so large a piece of mahogany, that he was obliged to saw it in half, before he could take it on board. These woods from warm climates, are frequently perforated by worms, (perhaps vermiculares and pholades,) which are said not to exist in the northern seas.

The navigators who have penetrated Behring's Strait, all agree in the fact of there being a constant current to the north, through this strait. On the southern shores of the islands of the Aleutian Archipelago, quantities of drift-wood are deposited. Forster says, "an enormous quantity of drift-wood is found in the sea, between Kamtschatka and America, and along the northern coast of Siberia;" and it may be remembered, that Captain Cook supplied his ship with firewood, from the ice of this strait. We can trace this floating wood into the strait, and, in fact, almost through the whole passage. Kotzebue found it in considerable quantity, in the sound which bears his name; and Captain Franklin says, "large pieces of drift-wood gave us assurance that we had finally escaped from the bays;" that is, being at Point Turnagain, the effects of the current of the sea were again visible. Kotzebue observed, that the floors of the houses of the natives, in the north-west part of America, were raised three feet from the ground—these floors were made from the drift-wood brought by the currents of the south. Some curious and well authenticated facts, relating to the passage of whales from one sea to the other, are mentioned by navigators. "Whales which have been harpooned in the Greenland Seas, have been found in the Pacific Ocean; and whales, with stone lances sticking in their fat, (a kind of weapon used by no nation now known,) have been caught both in the Spitzbergen Sea, and in Davis's Strait." *Scoresby's Arctic Regions*, vol. i. p. 8.

A whale was caught in the Tartarian Sea, from the back of which was taken a Dutch harpoon, with the letters W. B. upon it. This proved to belong to William Bastiaanz, admiral of the Dutch Greenland fleet, and was struck in a whale, in the Sea of Spitzbergen. A Captain Franks, in 1825, struck a whale in Davis's Strait, which was afterwards killed by his son, near Spitzbergen, who found

the harpoon in the fat of the whale, with his father's name on it. It must have passed to the north of Greenland, perhaps through Wellington Channel, as it is well ascertained they seldom pass down Davis's Strait, into the Atlantic Ocean. It is stated, on good authority, that whales have been as low down the western coast of America, as Nootka Sound, which had been struck in Davis's Strait, or the Sea of Spitzbergen.

It has frequently been asked, what advantage would result to the world from the discovery of a passage round the northern part of America? The fur companies of the north could well answer this query. If a trade could be opened in furs with the natives on the northern coast, most important benefits might arise,—the voyage to the East Indies, too, would be shortened one-third, and to our traders to the western coast it would be exceedingly advantageous.

In a geographical point of view, it would be exceedingly interesting; and such discoveries, Malte Brun justly observes, “enhance the dignity and value of human nature.”

If we look at the relative position of the land, in the northern part of our continent, four interesting points at once strike the eye—Icy Cape, Cape Turnagain, Cape Dundas, and Cape Garry of Prince Regent's Inlet. These may be considered as beacons to direct to the path by which the passage may possibly be made. The distance from Icy Cape to Prince Regent's Inlet is about 1500 miles, and might be run in fifteen days, unless some obstruction, not yet discovered, intervene. The space yet undiscovered seems to narrow with great rapidity. The distance from Cape Dundas, (extreme southern point of Melville Island,) to Icy Cape, is little over 800 miles—from the same cape to Point Turnagain, of Franklin, 350—and to Cape Garry but very little more. These are interesting objects, and arrest the attention of all readers of northern voyages of discovery; and the time cannot be far distant when the geography of this part of the continent will be almost as perfect as of that which is inhabited by more civilized man.

It appears to us that a voyage, the results of which would be eminently successful, could be made with less risk and less expense, than most of Parry's voyages, and with more certainty. Since the recent expeditions of Franklin and Beechey, there cannot be a doubt of there being a navigable communication round Icy Cape into the Polar Sea. We are unfortunately yet without the official statements of these gentlemen, but we have seen that their approach was separated by a distance of only about 130 miles. It appears from Captain Beechey's letter of November 4th, 1826, that he left St. Paul's, in Kamtschatka, on the 4th July, and proceeded to Kotzebue's Sound, where he remained only four days,

and then sailed to the northward. We are not told, in this letter, on what day he arrived there, nor on what day he doubled Icy Cape. Finding the ice to accumulate on the 14th October, he steered to the south. It may be fairly concluded he had more than two months of clear navigation in these seas, and we contend for the probability of a voyage being accomplished across the northern part of America in less than half that time from Icy Cape.

Captain Franklin found the sea at the mouth of Mackenzie's river open when he reached it on the 2d July, and sailed westward until the 15th August, having overcome half the distance to Icy Cape. No natural obstructions here compelled him to return. Uncertain whether the Blossom had been able to attain the place of rendezvous, he considered it his duty to preserve the lives of his followers by returning; certain destruction awaiting them should any accident have happened to that ship. The coast from Icy Cape to Point Turnagain may now be considered as discovered, and if Captain Parry were to undertake a voyage round this cape, prepared as he was in his second voyage for wintering twice, we have no hesitation in declaring our belief, that a single voyage, and a simultaneous land expedition, would settle this long discussed and intensely interesting question. If the navigator could double Icy Cape early in August, he would have full two months at least to navigate the sea to the eastward. On the approach of winter he might take up his quarters in George 4th Coronation Gulf, and during the following summer various excursions could be made to Bank's Land, Melville Island, Cockburn Island, Melville Peninsula, and those interesting straits called Prince Regent's Inlet, and Strait of the Fury and Hecla. The over-land expedition should proceed from Wager River, or Chesterfield Inlet, to George 4th Coronation Gulf, a distance of not 600 miles. Should this land expedition be considered as too hazardous, in consequence of the possibility of there being arms of the sea stretching into the land, then it would be of great importance that two boats, such as Captain Franklin used in his late discoveries, should be despatched to finish the survey of the coast to that neck of land which forms Melville Peninsula. We believe that such a voyage as this could be easily accomplished, and the result would clear up that moot point, so long argued in favour of a north-west passage.

To extol the merit of Captain Parry at this time would be superfluous. It is sufficient to say, that the voyage of which we are about to give some account, is the fourth to the northern regions, of which that excellent and able officer has had the command: that he was second in command, in Ross's expedition, we have already mentioned. We have no hesitation in saying these voyages have been conducted in a more philosophic and masterly

manner, than any hitherto undertaken ; and their failure of complete success is to be attributed to obstructions which could not be foreseen by the mind of man. The first navigation of these seas can only be done by "feeling the way."

Capt. Parry having proposed to Lord Melville an expedition towards the North Pole, to be effected by travelling with sledge-boats over the ice, after they should reach in the ship the highest latitude unobstructed by the ice, it was referred to the President and Council of the Royal Society, "who strongly recommended its adoption." The *Hecla* being accordingly prepared, Capt. Parry took his departure on the 4th of April, 1827, and on the 14th May arrived off Hakluyt's Headland, the northern point of a small island, close to the western side of Spitzbergen. After meeting with dangerous obstructions from the floating ice, the ship reached latitude $81^{\circ} 5' 32''$, the longitude being $19^{\circ} 34'$ east. Depth of water, ninety-seven fathoms. The temperature of the water at ninety-five fathoms, was $29^{\circ} 8'$, that at the surface 31° , and the air 28° . To the northward, nothing but loose drift-ice was seen, where they expected to find the flat, unbroken ice, particularly mentioned by Phipps. It being necessary to find a good harbour for the ship during the absence of the boats, they stood to the southward for Little Table Island, lying north of the Seven Islands. To the north of this island they discovered a "little islet," which was called after Lieutenant Ross. The boat was sent ashore here to look for shelter for the ship which it did not afford. "This islet consists of gneiss, having garnets imbedded in some specimens ; Mr. Beverly could not discover in what direction it dipped. This small rock, with specimens of which (as being the northernmost known land in the world,) the boat returned loaded, is about one hundred feet above the sea."

It was not until the 19th of June, after almost despairing of success, that Capt. Parry was enabled to find a harbour on this inhospitable and frozen coast. On this day they warped into a cove in Treurenberg Bay, west side of Spitzbergen, which they called *Hecla Cove*, latitude $79^{\circ} 55' 8''$ north, longitude $16^{\circ} 48' 45''$ east. This success renewed their spirits, and the worthy commander says he cannot describe the satisfaction it gave to every individual on board. "The main object of our enterprise seemed now to be almost within our grasp."

On the 22d, the party being prepared with two boats, underneath which runners were so fixed, as to render them easy to be drawn over the ice and snow, they received the usual salutation of three cheers from those they left behind, and departed for the north.

On the 23d, being stopped by the ice in $81^{\circ} 12' 51''$, they were obliged to haul the boats upon "a small floe-piece ;" and here commenced their travelling on the ice ; the plan of travel-

ling being nearly the same during the whole excursion, we give Capt. Parry's own account of their mode of proceeding :

"It was my intention to travel wholly at night, and to rest by day, there being of course constant daylight in these regions during the summer season. The advantages of this plan, which was occasionally deranged by circumstances, consisted first, in our avoiding the intense and oppressive glare from the snow during the time of the sun's greatest altitude, so as to prevent, in some degree, the painful inflammation in the eyes, called "snow blindness," which is common in all snowy countries. We also thus enjoyed greater warmth during the hours of rest, and had a better chance of drying our clothes; besides which, no small advantage was derived from the snow being harder at night for travelling. The only disadvantage of this plan was, that the fogs were somewhat more frequent and more thick by night than by day, though even in this respect, there was less difference than might have been supposed, the temperature during the twenty-four hours undergoing but little variation. This travelling by night and sleeping by day so completely inverted the natural order of things, that it was difficult to persuade ourselves of the reality. Even the officers and myself, who were all furnished with pocket chronometers, could not always bear in mind at what part of the twenty-four hours we had arrived; and there were several of the men who declared, and I believe truly, that they never knew night from day during the whole excursion.

"When we rose in the evening, we commenced our day by prayers, after which we took off our fur sleeping dresses, and put on those for travelling; the former being made of camblet, lined with racoon-skin, and the latter of strong blue box cloth. We made a point of always putting on the same stockings and boots for travelling in, whether they had dried during the day or not; and I believe it was only in five or six instances, at the most, that they were not either still wet or hard frozen. This, indeed, was of no consequence, beyond the discomfort of first putting them on in this state, as they were sure to be thoroughly wet in a quarter of an hour after commencing our journey; while on the other hand, it was of vital importance to keep dry things for sleeping in. Being 'rigged,' for travelling, we breakfasted upon warm cocoa and biscuit, and after stowing the things in the boats and on the sledges, so as to secure them, as much as possible, from wet, we set off on our day's journey, and usually travelled from five, to five and a half hours, then stopped an hour to dine, and again travelled four, five and even six hours, according to circumstances. After this we halted for the night, as we called it, though it was usually early in the morning, selecting the largest surface of ice we happened to be near, for hauling the boats on, in order to avoid the danger of its breaking up by coming in contact with other masses, and also to prevent drift as much as possible. The boats were placed close along side each other, with their sterns to the wind, the snow or wet cleared out of them, and the sails, supported by the bamboo masts and three paddles, placed over them as awnings, an entrance being left at the bow. Every man then immediately put on dry stockings and fur coats, after which we set about the necessary repairs of boats, sledges, or clothes; and, after serving the provisions for the succeeding day, we went to supper. Most of the officers and men then smoked their pipes, which served to dry the boats and awnings very much, and usually raised the temperature of our lodgings 10° or 15° . This part of the twenty-four hours was often a time, and the only one, of real enjoyment to us; the men told their stories and "fought all their battles o'er again," and the labours of the day, unsuccessful as they too often were, were forgotten. A regular watch was set during our resting time, to look out for bears, or for the ice breaking up around us, as well as to attend to the drying of the clothes, each man alternately taking this duty for one hour. We then concluded our day with prayers, and having put on our fur dresses, lay down to sleep with a degree of comfort, which perhaps few persons would imagine possible under such circumstances; our chief inconvenience being, that we were somewhat pinched for room, and therefore obliged to stow rather closer than was quite agreeable. The temperature, while we slept, was usually from 36° to 45° , according to the state of the exter-

nal atmosphere ; but on one or two occasions, in calm and warm weather, it rose as high as 60° to 66°, obliging us to throw off a part of our fur dress. After we had slept seven hours, the man appointed to boil the cocoa roused us, when it was ready, by the sound of a bugle, when we commenced our day in the manner before described.

“Our allowance of provisions for each man per day, was as follows :—

Biscuit	-	-	-	-	10 ounces.
Pemmican	-	-	-	-	9 ”
Sweetened Cocoa Powder	-	-	-	-	1 ” to make 1 pint.
Rum	-	-	-	-	1 gill.
Tobacco	-	-	-	-	3 ounces per week.

“Our fuel consisted entirely of spirits of wine, of which two pints formed our daily allowance, the cocoa being cooked in an iron boiler over a shallow iron lamp, with seven wicks ; a simple apparatus, which answered our purpose remarkably well. We usually found one pint of the spirits of wine sufficient for preparing our breakfast, that is for heating twenty-eight pints of water, though it always commenced from the temperature of 32°. If the weather was calm and fair, this quantity of fuel brought it to the boiling point in about an hour and a quarter ; but more generally the wicks begin to go out before it has reached 200°. This, however, made a very comfortable meal to persons situated as we were. Such, with very little variation, was our regular routine during the whole of this excursion.”

In this manner they advanced with the greatest labour, meeting frequently with obstacles and difficulties that could not have been anticipated. So early as the 26th June, they had experienced more rain than during the whole of seven previous summers *taken together*, though passed in latitudes from 7° to 15° lower than this. On the 4th of July he says—

“The rain had produced even a greater effect than the sun, in softening the snow. Lieutenant Ross and myself, in performing our pioneering duty, were frequently so beset in it, that sometimes, after trying in vain to extricate our legs, we were obliged to sit quietly down for a short time to rest ourselves, and then make another attempt ; and the men, in dragging the sledges, were often under the necessity of crawling upon all-fours, to make any progress at all. Nor would any kind of snow-shoes have been of the least service, but rather an incumbrance to us, for the surface was so irregular, that they would have thrown us down at every step. We had hitherto made use of the Lapland shoes or *hamoogas*, for walking in, which are excellent for dry snow, but there being now so much water on the ice, we substituted the Esquimaux boots, which had been made in Greenland expressly for our use, and which are far superior to any other for this kind of travelling. Just before halting, at six, A. M., on the 5th, the ice at the margin of the floe broke, while the men were handing the provisions out of the boats ; and we narrowly escaped the loss of a bag of cocoa, which fell overboard, but fortunately rested on a ‘tongue.’ The bag being made of Mackintosh’s water-proof canvass,* the cocoa did not suffer the slightest injury.”

The danger they were constantly in from the ice, may be imagined from the description of their crossing some of the floes.

“In crossing from mass to mass, several of which were separated about half the length of our sledges, the officers were stationed at the most difficult places, to see that no precaution was omitted, which could ensure the safety of the provisions. Only one individual was allowed to jump over at a time, or to stand near either margin, for fear of the weight being too great for it ; and when three or four men had separately crossed, the sledge was cautiously drawn up to the

* Made by a solution of caoutchouc placed between two pieces of canvass.

edge, and the word being given, the men suddenly ran away with the ropes, so as to allow no time for its falling in, if the ice should break. In one or two instances this day, we were obliged to have recourse to the still more hazardous expedient of ferrying all our provisions across a narrow pool of water upon a small piece of ice, the situation being such that our boats could not be thus made use of. Wherever the boats could possibly be hauled across with the provisions in them, we preferred this as a safer mode of proceeding; but this very precaution had nearly cost us dear to-day, for while we were thus dragging one of them along, the ice on which she rested began to sink, and then turned over on one side, almost upsetting the boat with the provisions in her. However, a number of the men jumped upon the ice, with great activity, in order to restore its balance, by their weight, and having cautiously unloaded and hauled her back, we got her over in another place. Having at length succeeded in reaching a small floe, we halted at half past six, A. M., much wearied by nearly eleven hours' exertion, by which we had only advanced three miles and a half in a N. N. W. direction."

The party frequently had the mortification of finding, after labouring for hours without intermission, that the currents from the north, had taken them as fast to the southward as they were able to travel to the northward, and thus like the ox labouring in the wheel, they found themselves, at the end of a fatiguing day's labour, just at the spot whence they set out in the morning. On the 26th July, in latitude $82^{\circ} 40' 23''$, they were more than three miles to the *southward* of their last observation, at midnight on the 22d, after having used every effort to overcome the difficulties that presented themselves. It had now become too evident, that even the parallel of 83° , near to it as they were, could not be reached. Having pushed on to the northward for thirty-five days, and having expended half their resources, it became absolutely necessary to turn to the southward, which they did on the 27th, after a day's rest.

The highest latitude they reached, was about 7 o'clock on the 23d July, "a little beyond $82^{\circ} 45'$." No bottom was found with a line of five hundred fathoms; the specific gravity of the water at that depth was 1.0340, being at the temperature of 37° when weighed. Six's thermometer failed to indicate the temperature at this depth, owing to the mercury rising past the index.

"At the extreme point of our journey, our distance from the Hecla was only 172 miles in a S. 8° W. direction. To accomplish this distance we had traversed, by our reckoning, two hundred and ninety-two miles, of which about one hundred were performed by water, previously to our entering the ice. As we travelled by far the greater part of our distance on the ice, three, and not unfrequently five times over, we may safely multiply the length of the road by two and a half; so that our whole distance, on a very moderate calculation, amounted to five hundred and eighty geographical, or six hundred and sixty-eight statute miles, being nearly sufficient to have reached the pole in a direct line. Up to this period we had been particularly fortunate in the preservation of our health; neither sickness nor casualties having occurred amongst us, with the exception of the trifling accidents already mentioned, a few bowel complaints which were soon removed by care, and some rather troublesome cases of chilblains, arising from our constant exposure to wet and cold."

On the 11th August, they finally quitted the ice, having been on it for forty-eight days, and on the 12th landed on the rock,

north of Table Island, where their provisions had been deposited. Captain Parry says, "I cannot describe the comfort we experienced in once more feeling a dry and solid footing." On the 21st they arrived on board the *Hecla*, after an absence of sixty-one days, "being received with that warmth and cordial welcome, which can alone be felt and not described." Proceeding on their voyage homeward, he arrived at the admiralty on the 29th September, where Captain Franklin, from nearly the opposite side of the globe, made his appearance the same day.

The incidents and observations of a few weeks travelling on the ice, cannot be various or many. We shall therefore take leave of Captain Parry, after selecting a few more facts well worthy of the reader's attention. It is a curious circumstance, as related before, that the sailors and many of the officers could not distinguish which part of the twenty-four hours was day, and which night, owing to the sun being at so nearly the same altitude during his daily revolution. The probability of mistaking midnight for midday, had been foreseen by our traveller, and he guarded against this misfortune, (for it would have been a serious one had they reached the higher latitudes) by causing a chronometer to be made with the hours running to twenty-four, that is, the hour hand made one revolution from meridian to meridian. "An error of twelve hours of time, would have carried us, when we intended to return, on a meridian opposite to, or 180° from the right one." The ice described as having been passed over on the 26th June, was of a very singular appearance and structure. It consisted of "numberless irregular needle-like crystals, placed vertically, and nearly close together." The upper surface of this ice looked like "greenish velvet." When compact, it resembled the most beautiful satin spar; when falling to pieces, it resembled asbestos. In latitude $82^{\circ} 14'$, snow tinged with red colouring matter was observed in quantities; this we presume must have had the same origin as that described by Captain Ross. We can well believe that beings, living in this atmosphere, must be very rare, when our traveller says on the 16th July, "a malle-mucke and a second Ross gull, and a couple of small flies, (to us an event of ridiculous importance) were found on the ice."

The meteorological and other tables of this narrative are interesting and important. It is a remarkable fact, "that *twenty times* as much rain fell in the course of this one summer" as during any of those which Captain Parry had passed within the Arctic Circle.

ART. XI.—*Précis Historique des Evénemens qui ont conduit JOSEPH NAPOLEON sur le Trône d’Espagne, par ABEL HUGO. Paris.*

Historical Summary of the Events which placed JOSEPH NAPOLEON on the Throne of Spain, by ABEL HUGO. Paris.

THE circumstances of the emigration to this country of Napoleon Bonaparte’s brother, who had possessed successively the crowns of Naples and Spain; of his long, contented, and munificent residence among us; and of the esteem conceived for him by all his American acquaintance, cannot fail to enter into our public annals, and awaken curiosity and reflection through a long tract of aftertime. By reason of Napoleon’s renown, and the share which was assigned him in the administration of the concerns of the European continent, a considerable interest adheres to his personal character, past career, and present position. On these accounts our attention was particularly attracted to the volume designated above, and we infer that whatever may be deemed authentic concerning the individual, in connexion with the history of the era, will be acceptable to the American world.

Abel Hugo was originally in the train of Joseph, as a page, and afterwards one of his staff in the Spanish campaigns. Though a devoted servant of “the principle of legitimacy and the august family of the Bourbons,” he has not hesitated to publish at Paris the highest praise of his old master; and he exults, at the end of his Summary, in the weight which his tribute to justice and gratitude is likely to have from the notoriety of his loyal opinions, and his independence on the favour of him whose merits he commemorates. The lamented General Foy, in the second volume of his History of the War in the Peninsula under Napoleon, has borne similar evidence to the excellent private dispositions, generous and enlightened public intentions and acts, liberal attainments and salutary ends, which distinguished Joseph in all the vicissitudes of the Bonaparte family. In adopting *him* as the subject of an article, we think it well not to confine ourselves to the authentic and honourable narrative of M. Hugo, but rather to furnish, from materials which we regard as having the stamp of full knowledge and authority, a sketch of his political life in general, and especially his scheme and course of government in Naples and Spain, and his important agency during the final struggles of Napoleon in France. These latter topics possess signal historical consequence in themselves, and are recommended here by a digest of striking particulars, now for the first time brought together so as to warrant confidence in their accuracy.

Joseph Napoleon Bonaparte was born at Corte, in the island of Corsica, in the year 1768. His father being deputed to Paris by

the states of that province, carried him to the continent and placed him at the College of Autun in Burgundy, where he completed his course of studies with great distinction. His own predilections were in favour of a military life, but in obedience to the last wishes of his father, who died at Montpellier in the prime of life, he abandoned these views, and returned in 1785 to his native country, where he became in 1792 a member of the Departmental Administration under the presidency of the celebrated Paoli. When the English, availing themselves of the distractions and troubles of France, took possession of Corsica, Joseph retired to the continent, and in 1794 married one of the daughters of M. Clari, one of the richest capitalists of Marseilles.

At this time he united with his colleagues of the department,* some of whom had become members of the convention, in urgent entreaties for the supplies requisite to drive the English out of the island, but their application was disregarded until 1796, and it was only after the occupation of Italy by the French army that their wishes were crowned with success. In that campaign Joseph accompanied his brother. Circumstances rendering General Bonaparte anxious to conclude a peace with the king of Sardinia, he dispatched him from Piedmont to demonstrate the necessity of this measure to the Directory.

Appointed minister plenipotentiary, and afterwards envoy extraordinary to the court of Rome, he entered directly on a negotiation with his Holiness Pope Pius VI. the object of which was to obtain the good offices of the pontiff in bringing the Vendeens to peace. And for that purpose his holiness engaged to employ all those means of authority and persuasion, with which the confidence of that people had invested the visible head of the catholic church. This treaty was in progress, and he had good reason to hope a successful issue to the negotiation, but the favourable dispositions of the Papal Court were counteracted by the intrigues of the Austrian party as well as by the imprudence of the revolutionists, some of whom were shot by a battalion of the Roman soldiery in the court-yard of the French palace, where they had taken refuge. It is known that at Rome the residences of envoys of the great powers enjoy the privilege of sanctuary in common with most of the churches. In the present instance, however, this immunity was disregarded, and Duphot, one of the French generals, in the suite of the ambassador, was killed at his side whilst engaged in endeavouring to bring the two parties to reason.

* It is not true, as has been alleged in a work published at Paris, that he was secretary of the representative of the people, Saliceti, in the National Convention. That deputy, the only one from Corsica who voted for the death of the king, had been his colleague in the department of Corsica, as most of the other deputies of that department had at different periods been, all of whom voted in favour of the king.

Not receiving the satisfaction due to him for this outrage, the Minister withdrew and proceeded to Paris, where the government fully sanctioned his conduct, and offered him the embassy of Prussia. But Joseph had been recently named a member of the Council of Five Hundred, and he preferred showing his gratitude for the confidence of his fellow-citizens by entering the legislative body. He was there soon distinguished for sound sense and moderation. Upon one occasion, when, in a joint committee of the two councils, the Directory made an attack upon his brother, General Bonaparte, who was absent in Egypt, Joseph addressed the body with so much energy and conclusive argument that his accusers were confounded, and an unanimous vote obtained in his favour. A few days after this occurrence he was appointed secretary of the Council of Five Hundred.

Under the consulate, he was a member of the council of state. Being nominated with Messieurs Rœderer and De Fleurien to discuss and terminate the differences which existed between France and the United States of America, he was one of the negotiators of the treaty of the thirtieth of September, 1800, which was signed at his estate of Mortefontaine.

On the ninth of February, 1801, he signed, with the Count de Cobenzel, at Luneville, the treaty between France and Austria; and it has been remarked as a singular circumstance during that negotiation, that although Mantua had been left in the hands of the Austrians by virtue of an armistice agreed upon between the commanders in chief in Italy, a convention concluded at Luneville by the plenipotentiaries put the French army in possession of that important post.

The treaty of Amiens, which was signed on the twenty-fifth of March, 1802, was also conducted under his management and direction. The instructions of the British plenipotentiary required that each government should discharge the expenses of its own prisoners. A balance of several millions of francs appeared against France, and this circumstance threatened to arrest the progress of the negotiation, when Lord Cornwallis assured Joseph confidentially, that the question of a few millions should not prevent the conclusion of peace. But some days after, the British government had changed its views, and the plenipotentiary received orders to insist upon the payment of this balance as a condition *sine qua non*. Lord Cornwallis, however, not choosing to be put to the blush before a man whose character and conduct had inspired him with esteem, openly declared that his word had been given, and should not be forfeited for the sum in dispute. Whilst engaged in diplomatic pursuits, Joseph was the first to suggest a plan of concert among the contracting parties, France, England, Spain, and Holland, for the suppression of that system of rapine and piracy, whereby, to the disgrace of the Great Powers of Christendom

the smaller states were annoyed by the corsairs of Barbary. This liberal project was communicated in a letter to his brother, then First Consul, by whom it was adopted. In the year 1803, he was created a senator, and member of the grand council of the legion of honour.

The concordat with the Court of Rome was signed by Joseph, by the Abbe Besnier, since Bishop of Orleans, and by the Minister of the Interior, Cretet; the Cardinals Caselli, Spina, and Gonsalvi, signed on behalf of the Holy See. By this important measure the peace of the Church was consolidated, the liberties and immunities of its Gallican branch were secured, and a fearful volcano which had been lighted up by fanaticism in the departments of the west was extinguished. Nearly at the same time the treaty of guarantee was signed with Austria, Russia, Prussia, and Bavaria, which recognized and confirmed the various political changes which had taken place in the Germanic empire. In this negotiation also, Joseph was invested with the full powers of France.

The camp at Boulogne was formed in 1804. Napoleon invited his brother to take part in that expedition. He accepted the command of the fourth regiment, and repaired to the camp, where he contributed his full share to the spirit of concord and union which so remarkably distinguished that large body of officers, whose opinions and prejudices upon most subjects were far from harmonious. But Joseph was now summoned to a more exalted sphere of action, and the residue of his public life was passed in the midst of those striking revolutions which so remarkably characterized the early part of the present century.

The senate and people of France, on calling Napoleon to the empire, declared Joseph and his children heirs of the throne, on failure of issue of Napoleon. In the same year, the crown of Lombardy was offered to him. Not choosing, however, to renounce the new political bonds which attached him to France, nor to enter into engagements which appeared to him to press hard upon Lombardy, he refused it. During the campaign of Austerlitz, he remained in the direction of affairs at Paris. A few days after that battle he received an order from the Emperor to proceed to Italy, and assume the command of the army destined to invade the kingdom of Naples, whose sovereigns had violated the treaty which bound them to France. The Neapolitan forces had been augmented by fourteen thousand Russian, and twelve thousand English auxiliaries. On the eighth of February, 1806, forty thousand French troops entered that kingdom. Joseph, at the head of the corps of the centre, arrived before Capua, which, after making a show of resistance, opened its gates. Eight thousand men were there made prisoners of war. The English and Russians effected their retreat, and king Ferdinand embarked for

Sicily, after creating a Regency at Naples, by whom commissioners were immediately despatched to the French head quarters. They entered into stipulations for the surrender of the capital and all the fortified posts, and this agreement was carried into effect; with the exception of the fortress of Gaeta, under the command of the Prince of Hesse-Philipstadt, who disavowed the authority of the commissioners. The siege of that place was accordingly directed. General Regnier had orders to pursue the Neapolitan army, which was directing its retreat on Calabria. He overtook and defeated them at San Lorenzo, Lago Negro, and Campo Tenese.

Joseph made his entry into Naples on the fifteenth of February, 1806, and was received with open arms by the people as their deliverer. He availed himself of these favourable indications by retaining in public stations the greater part of those who then occupied them. No sooner had he organized a provisional administration in the capital, than he determined to make a personal examination into the state of the kingdom generally, and also to satisfy himself, by actual inspection on the spot, of the feasibility of an attempt upon Sicily. With these views, he commenced a tour, attended by a *corps d'élite* under the command of General Lamarque. The course adopted as he advanced, was eminently calculated to afford him accurate and practical information of the character, peculiarities, and wants of the country and its inhabitants. He halted in all the villages—entered the principal churches, where the clergy were in the habit of assembling the people. The condition to which the country was reduced, favoured his views in this investigation. Beneath the most enchanting sky, in the shade of the orange and the myrtle, it was not uncommon to find an entire population covered with rags and worn down by poverty and starvation, prostrated on the luxuriant soil, from which moderate industry might with ease obtain an ample support—uttering the most abject supplications for charity and compassion. Nor was it difficult to perceive that these unhappy beings entertained the most absolute indifference as to political changes, resulting from the conviction that whatever the result of the new order of things then announced to them might be, their own situation could by no possibility be rendered worse. So far had their former rulers been successful in desolating and destroying the fair work of nature!

It was during this journey, that Joseph first received intelligence that the emperor had recognised him as king of Naples, and that the other sovereigns of the European continent were disposed to do the same within a short period. On his arrival at Palma, at the entrance of the Straits of Messina, he was forced to admit the impossibility of an expedition against Sicily. The enemy had concentrated his forces there, and carried off with him

all means of transportation, even the smallest skiffs. Thus compelled to postpone the attempt, he continued his journey across that Magna Græcia, once so celebrated and flourishing, then so humbled and degraded. His course led him along the shores of the Ionian sea, passing through Catanzaro, Cotroni, and Cassano. It was during this *progress* that he caused an examination to be made by competent officers, into the character and practicability of a project long since conceived, of uniting the Ionian and Tyrrhenian seas by a canal, and ordered surveys to be made and plans drawn, which might serve hereafter for the direction of that magnificent enterprise. He visited Tarentum, traversed the Basilicate and a part of Apulia, and returned to his capital, where he was awaited by a deputation of the French senate, appointed to offer the felicitations of that body on his accession to the throne of Naples, and express the hope of still preserving him as grand elector and a prince of France. This deputation consisted of Marshal Perignon, General Ferino, and Count Rœderer. The last accepted the department of finance at Naples, and skilfully availing himself of the aid and support afforded by the king in reorganizing the fiscal affairs of the kingdom on new bases, established a public credit which has maintained itself under all the changes that have subsequently occurred. Marshal Jourdan, who had been appointed governor of Naples by the emperor before the accession of the king, was retained in the same station.

Congratulations were tendered by all classes of his subjects. The clergy led by Cardinal Ruffo, the nobility, and the people, vied with each other in celebrating the arrival of the new monarch. The capital and the provinces united in expressing their satisfaction in the result.

In the formation of his government, Joseph appointed a council of state, composed of a large number of individuals, in the choice of whom he was guided by public opinion, without distinction of birth or party. It was a ministry in which the most celebrated lawyers found themselves associated with barons of the loftiest birth. The French whom he admitted to his council or to his court, were generally men who had been most distinguished for their abilities in the national assemblies of France; Rœderer, Salicetti, Mathieu Dumas, Miot, Cavagnac, Stanislas Girardin, Jancourt, Arcambal, Dedon, Maurice Mathieu, Saligny, Ferri, Hugo, Blagniac, &c. &c.

Such modifications and improvements as had been suggested by his unreserved conversations with men of all classes of his subjects in the long progress he had then completed, were marked out for accomplishment in proper time, and in a calm and deliberate manner. His council of state he divided into sections, and gave in charge to each committee the task of digesting all practicable reforms pertaining to its peculiar department, holding

up to them as a model, the French Revolution, but at the same time earnestly cautioning them to avoid its evils, whilst they imitated and improved upon the fortunate changes it had introduced. Upon all he enjoined strict justice and moderation—the only true guides to the happiness of nations.

The war, however, was not at an end. Gaeta kept a portion of the army employed—the English squadron was on the coast—the Neapolitan troops, although beaten and dispersed, had formed themselves into numerous private bands, which infested and pillaged the country. The Sicilian Court had instigated the landing of an English army in the Gulf of St. Euphemia, where four thousand Poles and a handful of French soldiers were beaten, an occurrence which for the moment fomented partial insurrections. Earnestly engaged in concentrating the requisite means for reducing Gaeta, Joseph proceeded in person to that fortress, and at the same time ordered thither a flotilla of gun-boats, which he had caused to be built, armed, and equipped—he visited the trenches and the most advanced batteries—he reconnoitred the post where the brave Vallongue, general of engineers, had been recently killed, and ordered the immediate erection of a monument to his memory.

On the seventh of July the king was again under Gaeta, accompanied by Generals Campredon of the Engineers, and Dulauloy of the Artillery, and in his presence a battery of eighty pieces of cannon opened its fire with such effect, that on the eighteenth two breaches were practicable, and Marshal Massena was making his dispositions for the assault, when the garrison of seven thousand men proposed a capitulation which was signed the same day. Massena and his corps d'armée were then directed on Calabria, whence the English retired, on his approach, to Sicily—Joseph himself moved on Lago Negro with a reserve. The marshal having received orders to rejoin the Army of Germany, the king substituted General Regnier in the government of Calabria. This officer effectually destroyed a body of troops, consisting of about six thousand men, which had been landed from Sicily under the command of the Prince of Hesse-Philipstadt. The post of Amantea was captured, that of Marathea had been taken some days before by General Lamarque. On the side of the Adriatic, General St. Cyr, commanding the Italian divisions, had quieted those provinces and taken Civitella del Tronto. Affairs began to assume a more settled aspect. The chiefs of the most active bands had fallen, all attempts at the assassination of the new king had proved abortive, and the national guards which had been organized in all the provinces under the command of the wealthiest proprietors, (who had all espoused the new régime,) contributed greatly to extinguish the flame of revolt and preserve

the tranquillity of the country, as soon as the principal masses of the enemy had been beaten and dispersed by the army.

Before returning to Naples the king renewed his visit to the provinces, and persevered in the same course of inquiry and inspection which had produced so much satisfactory information on the former occasion. Mingling freely with the inhabitants, he interrogated them directly as to their wants and wishes—inquired into abuses—called certain dishonest functionaries to a severe account—and by the strict impartiality he maintained, as well as the sincere interest he exhibited in the welfare of his subjects, inspired universal confidence and secured a peaceful triumph over their hearts and affections, far more glorious than any which owes its origin to authority or force. Rich in the personal knowledge he had thus acquired of his people—of their necessities and desires, he fully developed his plans of reform to the councillors of state, whom he had appointed on his first arrival, and found little difficulty in persuading this intelligent and patriotic ministry that the individual good of each class was to be found only in the meliorated condition of the whole. Few instances on record more strikingly exemplify the power of reason over the minds of the most bigotted than the events of this revolution. The principal nobles of the kingdom were the first to applaud and sustain the projects of reform: thus, feudal rights were abolished with their free consent, and the most enlightened prelates, also members of the council of state, approved and voted for the suppression of the monastic orders, whose funds soon contributed to the solidity of public credit. A judicious administration introduced order and system into the finances. The feudal judges whose jurisdictions had been annulled, were for the most part selected for judicial appointments in the new royal institutions. In a word, the national welfare and regeneration were attained without blood or tears, or the oppression of a single individual. Every thing was done *for* the people, but nothing *by* the people, and the awful convulsions attendant upon the sudden rising of an oppressed nation were thus carefully avoided. Wisdom and moderation presided over these important changes. Monks, priests, nobles, all were satisfied with the public felicity in which they each enjoyed a share.

The provincial intendants received instructions to engage such of the ex-monks as possessed the competent ability and inclination, in the work of public education. Those who were deemed suitable for the duties of a parochial clergy were not removed. The more infirm who had grown old in the cloister and survived all their relatives, were assembled, protected, and encouraged in large public establishments, where they continued, with ecclesiastics of different orders, to live in common. The learned among

them, still possessed of youth and health, who preferred living thus, were permitted to devote themselves to the prosecution of those sciences which had so signally illustrated their predecessors, and the famous houses of Monte-cassin and La Cava were assigned to them, where the libraries and manuscripts of other religious houses were collected. These precious deposits were consigned to their care. Other individuals of the monastic orders, who yet retained the vigour of youth, occupied the two great establishments of Cinquemiglia and Monte Tenese, which were regulated on the plan of that which exists at St. Bernard; and the peculiar duty assigned to them was to watch over the safety of travellers in the lofty regions of Calabria and the Abruzzi, which are generally covered with snow.

The prisons, encumbered with crowds of unhappy wretches, who had languished for years within their pestilential enclosures, were emptied of their tenants by the sentences of four tribunals erected for that express object. An ignominious method of recruiting the armies from the prisons, known under the name of the *trullati*, was abolished. In each province a college and house of female education was established. The daughters of officers and of public functionaries enjoyed the benefit of a central institution, under the immediate protection of the queen, at Aversa, into which the most distinguished pupils of the provincial schools were, of right, admitted at the end of each year. The provincial administration, the military and the civil engineer corps were emulously employed on public works. Practicable roads for wheel-carriages were opened as far as Reggio, from one extremity of the kingdom to the other, and by the energy and skill of those bodies, an enterprise, commenced ages before, and then known only by the tax existing under the name and pretext of the *Calabrian road*, was promptly completed:—in a single year the road was finished, and the impost abolished. From time immemorial in the Neapolitan dominions the royal progresses had been an oppressive charge upon the people, owing to the privileges enjoyed by each officer of the royal household. These privileges were annulled and the exactions discontinued.

The people of the Abruzzi having expressed a wish to receive a visit from the king, similar to that which he had made to the Calabrians, he acceded to their wishes, and on the tour he made in their country, enjoyed the gratification of beholding the entire population of several districts meet him on his passage—labouring with ardour to open new roads, and to improve the face of their country—already convinced that the change from sloth and listlessness to active and enterprising industry was the most acceptable homage which they could offer to their new king.

His attempts to conciliate those who, from their connection with the foreign troops or from other causes, were inimical to his

government, were marked with perfect and fearless confidence. Chiefs of the private bands who had submitted and come in were freely admitted to private interviews with the king; nor had he cause, in a single instance, to repent it. One of these leaders, who had resolved at last to enter the royal service, chose to exhibit a degree of confidence equal to his own. Knowing that this prince was expected at Salerno with a considerable body of troops, he drew up his band on the road in array of battle. The king, attended only by a few officers, came upon them far in advance of his guard. He was saluted by the chief, and requested to review his troop, all of whom took the oath of allegiance, mingled with the royal escort, actually entered Salerno with it, and became the nucleus of another Neapolitan regiment.

The spirit of improvement actively pervaded every department. Several manufactories of arms were established by the General of artillery, Dedon—an army of twenty thousand Neapolitans was organized and the system of military administration in use in the French armies introduced into it—provincial regiments were raised, and the command of them generally conferred on the sons of the most influential families—a military school was established under the direction of General Parisi—a topographical bureau organized and intrusted to the government of the learned geographer, Zannoni,—the labours of the splendid map of the kingdom were resumed and completed—fortified places and the ramparts of the cities were restored and strengthened. The navy presented a force of one ship of the line, a few frigates, and about ninety gun-boats, carrying a single twenty-four pounder each, which had been constructed for the expedition of Capri.

By the direction of the king, skilful engineers had examined a seite for the erection of a village, where a portion of the *Lazzaroni* who infested the capital with their laziness and misery were to be employed. Two thousand of these wretched beings were embodied in a corps of labourers. Clothed, fed, and paid, their toil eventuated in the completion of a new passage from the metropolis, under the Capo di Monte, which rivalled in beauty the Grotto of Posilipo. The city was embellished, and a part of the population, until then thought incorrigible, became active and industrious. Individual crimes ceased as soon as a paternal administration took charge of this unhappy race, and far from banishing or destroying them, discovered and applied the true system of reform—that of reputable labour. The aged and respectable *Cianciulli*, whom King Ferdinand had left as one of the regents of the kingdom, and who had become chief justice under Joseph, was in the habit of saying to the minister of police on entering the council after traversing these work-shops, “I have seen the work-shops of the Lazzaroni, have you any further report to make?” And in fact the moderate labour and restriction to

which this numerous, beggarly, and destitute class had been subjected, prevented the commission of offences, and almost dispensed with the action of the police. The city of Naples, which, in common with most of the Italian towns, was lighted only by a few wretched lamps placed at the feet of the Madonnas, in the second year of Joseph's reign was completely lighted in the style of the city of Paris with reflectors, and the experiment was then tried for the first time of the parabolic mirror. The hospitals established at this period, were endowed out of the national funds, and the nobility received an indemnity for the feudal rights they had surrendered, in certificates which were taken in payment for the national domains; the public debt was chiefly paid off, and its entire discharge secured by the creation and endowment of a sinking fund—a loan, filled in Holland, was guaranteed and its repayment assured in national certificates.

The excavations at Pompeii and in Magna Græcia were encouraged. A learned body was established by the king, under the title of the Royal Academy, and divided into four classes. In this institution those of Herculaneum and Pompeii were merged. The conservatorios of music were fostered, although at the same time an infamous practice which no taste for this art can palliate, was forbidden under the severest penalties. The Academy of Painting soon numbered twelve hundred pupils. In honour of the national poet the king made a formal visit to the house in which Tasso was born, at Sorrento, a town which can only be reached on horseback along the brink of a precipice. He directed a collection to be made of all the editions of this celebrated poet, and to be deposited in the house, under the care of his nearest lineal descendant, to whom he granted suitable appointments. And to facilitate visits to this shrine of genius, he directed a convenient road to be opened to that point.

In his travels through Apulia, Joseph had been much struck by the establishment of the *Mesta*. This system may have been useful when agriculture was in its infancy, and the principal reliance of the peasant was on his herds. It is the plan adopted by the Spaniards for the pasturage of their flocks of sheep. A vast district known under the name of the "*Tavoliere di Puglia*," belonging to the crown, was withheld from culture, and dedicated exclusively to the pasturage of innumerable flocks, which resorted thither every year from all parts of the kingdom. A special administration existed for this establishment, at the city of Foggia, which is situated in the heart of this territory. The annual income of it was considerable—so great, it has been remarked in the history of the wars of that country, that the season of these payments often entered into the estimates and arrangements of their generals. So much was the king's attention excited by this singular institution, that he carried with him from Foggia one of the

administrators who had furnished him with a manuscript of the celebrated Filangieri, who, many years previous, had proposed the destruction of this system of the *mesta*. And on his return to Naples he caused this project to be discussed and thoroughly examined by his council of state, which was then composed of near fifty members. It was adopted, to the great benefit of the public treasury—for, this fertile and extensive territory was purchased and brought into luxuriant cultivation by industrious agriculturists.

The Custom Houses were removed to the frontiers of the country. A land tax, equably levied and collected, permitted the repeal of all other direct imposts. The civil list was fixed at one hundred thousand ducats per month, and one moiety of this sum was discharged in certificates receivable in payment for public lands, of which the king made presents to many of the inhabitants of Naples who were attached to his court. These domains encircled his residence at Capo di Monte. His principal motive in adopting this course was a wish to inspire the Neapolitan nobility with a taste for a country life. In furtherance of this view, he created an Order to which persons of all pursuits and professions were admitted, and he appointed a grand dignitary of the order in each province, to reside on an agricultural establishment, the government and management of which were intrusted to him. This was intended as a species of model farm, the best means which could be devised for extending a knowledge of the most approved theory and practice of culture among the people. At the same time, he influenced the barons, whose domains he traversed, to re-establish their ancient residences, and invited them to accompany him in his progresses, and upon all occasions to hold themselves forth as protectors of the country and friends of the poor. He had planned several large buildings at the most distant points from the capital, and a residence at each of them for a portion of the year, that he might judge by personal inspection of the progress of his institutions.

Under the former government, the most rigid etiquette prevailed at the palace. The Sovereign was accessible only to a very small number of favourites. Feeling the necessity of seeing and hearing every thing, and apprehending nothing from the detection of his most secret thoughts, Joseph threw open his palace to the nobility, to his ministers, to the counsellors of state, the members of the tribunals, the municipality of Naples, and officers of the higher grades. From their families he daily selected the guests of his table. It was thus he gained an influence over the minds and hearts of all classes of society, and thus that the greatest changes were peacefully effected by invoking the practical good sense of the people to his aid, without the slightest employment of force.

Joseph presided in person at the meetings of the council of state, and although at that period no regular constitution existed, and his will was supreme, the instance is not to be found in which he ever adopted a decree unless approved by a majority of votes after a discussion, in which uncontrolled liberty of debate was allowed. Speaking Italian with ease, he availed himself of this advantage, to develop, and to support theories, new to that people, but whose utility had been fully determined by experience in France. When Joseph arrived in Naples, the revenues of the state did not exceed seven millions of ducats: they were augmented by him without the slightest oppression, and in fact with a diminution of the public burdens, to fourteen millions. At the same period the public debt was one hundred millions. Of this, fifty millions were paid off, and the means ascertained and secured for the extinguishment of the residue. His efforts at reform and improvement in all the departments of government, were crowned with entire success, and every species of national and individual prosperity was opening on Naples, in brilliant perspective, when the will of Providence removed him to a different scene where greater exertions and sacrifices were demanded, and where, but for the unparalleled occurrences of 1813-14, he would, in all human probability, have succeeded in regenerating one of the fairest portions of Europe.

In an interview which he had, some months previous, held with the Emperor Napoleon at Venice, he received an intimation of the feuds which distracted the reigning house of Spain, and of the political embarrassments to which they must inevitably lead. He now received from Bayonne, where the Spanish princes had joined Napoleon, a pressing invitation to proceed without delay to that city. Nothing was yet decided, and no views or intentions explained; and it was in this total uncertainty both of projects and of events, that Joseph set out, cherishing the delusive hope of again returning to his family at Naples, where they remained. But at a short distance from Bayonne he was met by the emperor. Napoleon then informed him that the passions of the Spanish princes had produced a crisis which had arrived but too soon—that they were as far from an harmonious agreement at Bayonne as they had been in Spain—that Charles IV. preferred retirement in France on certain conditions, to re-entering Spain without the Prince of Peace—that both he and the queen chose rather to see a stranger ascend the throne than to cede it to Ferdinand—that neither Ferdinand nor any other Spaniard wished for the return of Charles, if he was determined to restore the reign of Godoy—and that they also would prefer a stranger to him—that he, (the emperor,) perceived that it would cost him a greater effort to sustain Charles, with the Prince of Peace, than to change the dynasty—that Ferdinand appeared to him so inferior,

and of a character so vague and uncertain, that it would be highly indiscreet to commit himself on his behalf, or attempt to sustain a son in the struggle to dethrone his father, and that such a dynasty would be as little suited to Spain;—that no regeneration was practicable whilst it continued—that the first personages of the kingdom, in rank, information, and character, assembled in a national junta at Bayonne, were convinced of this truth—and that, since destiny pointed out this course, and he then felt assured of accomplishing what he would not have voluntarily undertaken, he had nominated his brother, the king of Naples, who was acceptable to the junta, and would be so to the nation at large. Ferdinand had long since solicited one of his nieces in marriage, and the kingdom of Etruria, but since his residence at Bayonne, and more intimate knowledge of that prince, he did not think proper to accede to his wishes. He further urged that the Spanish princes had departed for France—that they had ceded to him all their rights to the crown, which he had transferred to his brother, the king of Naples—that it was highly important that his brother should not hesitate, lest the Spaniards, as well as foreign monarchs, might suppose that he, (Napoleon,) wished to encircle his own brows with this additional crown, as he had done with that of Lombardy some years before, upon the refusal of Joseph to accept it—that the tranquillity of Spain, of Europe, the reconciliation of all the members of his own family,* depended upon the course which Joseph was then about to adopt—that he could never allow himself to believe that regret at leaving an enchanting country, where no danger or difficulty remained to be combated, could induce him to refuse a throne where many obstacles, it was true, were to be surmounted, but where also much good was to be accomplished. This conversation contained matter for the serious reflection of the king of Naples; but when he arrived at Bayonne, the members of the junta were all assembled at the chateau of Marrac, and he was obliged to receive their addresses, to which he returned vague and indefinite answers, postponing a decision until he could, in the course of a few days, see the different members in private. The Spanish princes were gone. The Duke del Infantado and Cevallos passed for the warmest partisans of Ferdinand—both were presented the next day to take leave. Joseph had a long conversation with the Duke which terminated in a full offer of his services. This nobleman then observed that he now found the intelligence which had been transmitted to him by his agents at Naples, where he possessed domains, was true, and if Joseph was destined to be to Spain what he had been to Naples, no doubt could exist but the entire nation would rally round him. He also assured him that he would find the same dispositions in

* It was then proposed to recognise Lucien as king of Naples.

Cevallos and in all the members of the junta—that those who were regarded as the most violent partisans of Ferdinand, entertained for that prince, of whom they knew little, and expected every thing, merely that sort of attachment which a misgoverned nation exhibits, in turning to any one whom it considers most competent to redress its grievances. Cevallos held nearly the same language to Joseph, who afterwards received in succession all the members of the junta. It consisted of nearly one hundred persons. They painted in strong colours the evils which afflicted their country, and the facility which existed for their suppression. In fact the courtiers of the father and the son were agreed upon one point, the absolute impossibility, namely, of their living together under either of them. Joseph, alone, by sacrificing the throne of Naples to ascend that of Spain, appeared to unite all parties, and promised, as they fondly hoped, to restore and even to surpass the happy reign of Charles III.

The rising at Saragossa and in several of the provinces under the pretence that Napoleon was seeking to annex Spain to France—the assurances given by all the members of the Junta, (without a single exception,) to Joseph, that his acceptance of the crown would quiet these troubles, insure the independence of the monarchy, the integrity of its territory, its liberty and happiness, which appeared so practicable to a prince who had crossed the Pyrenees solely with this noble purpose, aroused and exalted the natural generosity of Joseph's temper. He yielded, and sacrificing his dearest interests to the hopes of promoting the welfare of a much greater number of men, finally resolved to accept the throne which was offered to him. He felt it an imperative duty to seek the post where the greatest peril existed. Duty, not ambition, conducted him to Spain. But he would not leave the throne of Naples without obtaining a pledge that his institutions should be preserved, and that the Neapolitans should enjoy the benefits of a constitution which was in a great measure a summary of his own most important laws, sufficient then for the circumstances and wants of that people. He obtained for it the guarantee of the Emperor Napoleon, and would only enter Spain on that condition. A constitution founded nearly in the same principles was adopted by the Junta of Bayonne for Spain, and also guaranteed by the emperor. Joseph and the members of the Junta swore fidelity to it: had events permitted them to maintain their oaths, there is little doubt it would have sufficed for the regeneration of that people. The recognition of national sovereignty represented in the Cortes, the independence of their powers, the demarcation of the patrimony of the crown and the public treasure would alone have proved sufficient to extricate Spain from the abyss into which she had been sinking for centuries.

The accession of Joseph to the throne of Spain was notified by

the Secretary of State Cevallos to the foreign powers, by all of whom, with the exception of England, he was formally recognized. Thus at first, his relations with the monarchs and governments of the continent were satisfactory. The Emperor of Russia had replied to the communication of General Pardo, Ambassador of Spain, by felicitations grounded on the personal character of the new king. Ferdinand had written letters of congratulation, and one amongst others wherein he implored his intervention and good offices to induce the Emperor Napoleon to give him one of his nieces in marriage. The oath of allegiance of the Spaniards who were with him in France was annexed to these letters, which were made known by a Spanish nobleman to the chiefs of the insurrection. Most of the members of the Junta had previous knowledge of them. Upon his entry into Madrid, Joseph found the people greatly exasperated at the events of the second of May, 1808. A stranger to all that had passed, and strong in his own innocence, he convened on the morrow, at the palace, all those persons who might naturally be regarded as representatives of the different classes of society—grandees of Spain—chiefs of the religious orders—members of the tribunals—priests—officers—generals—the principal capitalists—the syndics of the various handicrafts. All the saloons were crowded for the first time with a concourse of men who were astonished to find themselves together. The new king entered into free conversation with his guests, and expressed himself with candour on the events which had brought him into Spain, on the motives of his conduct, on his views and intentions. He ventured alone into the different rooms filled with crowds of persons inimical to him, and inspired so much confidence by this fearless reliance on their honour, that all hearts were gained. And in a few days these missionaries whose services he had secured by his confiding hospitality, completely changed the opinions of the capital. But all these gleams of popular favour were overcast by the disastrous intelligence from Baylen, which arrived six days after this entertainment. The retreat on Burgos was effected, and the king found himself in the midst of Marshal Bessières' army—that army which but three weeks before had so gallantly fought and won the battle of Rio Seco. On quitting Madrid, he left the minister of justice, Pinuella, Cevallos and the Duke del Infantado with instructions to sound the chiefs of the Spanish army recently victorious at Baylen. At this juncture General Junot found himself compelled to evacuate Portugal, and thus left all the English and Portuguese forces disposable. The Spaniards flocked in from all quarters against the French army, which was unable to resume offensive operations until the month of November. The actions of Tudela, Burgos, and Sommo Sierra once more opened the gates of Madrid. The emperor had arrived and put himself at

the head of his army, but was soon summoned, first by the English to the frontiers of Galicia whence he drove them out, and then by the Austrians to Germany. On his departure he left his brother in command of the forces that remained in Spain.

King Joseph returned to his capital on the twenty-second of January, 1809. The people had not lost the remembrance of the hopes which they had conceived on his first entry. Every inhabitant came individually to take the oath of allegiance to him, each in his respective parish. Joseph exerted himself to foster, and extend these favourable symptoms. On a solemn occasion he renewed the assurances he had already given of his determination to maintain the independence of Spain, to preserve her territory entire, to support her religion, and to protect and uphold the liberty of her citizens, "conditions," he said, "of the oath which I took on accepting the crown; it shall never be dishonoured whilst on my head." He pledged himself for the convocation of the Cortes and for the evacuation of Spain by the French troops as soon as the country should be pacified. "If I love France as my family," he often exclaimed, "I am devoted to Spain as to my religion."

The choice of his ministry was made with entire deference to public opinion. The nomination of the members of his council of state was governed by the same spirit. Five regiments were already organized, from which all persons stained by criminal convictions were carefully excluded. Infamous punishments were discontinued, and the stimulus of honour and love of country, as in the French army, substituted for corporal inflictions, which are fit only to make slaves and not soldiers. Pursuing the same course which his own sense of justice and views of policy had dictated in his former government at Naples, he recognized the existing public debt, and provided means for its extinction—gave facilities for the secularization of monks, without, at that moment, compelling it—inspected in person the works then unfinished and necessary to the completion of the Guadarama canal—promoted that useful enterprise, and generally gave aid and countenance to national industry in its various departments.

The earliest military occurrences of his reign were propitious. Saragossa had opened its gates to Marshal Lannes: the enemy was defeated at Medelin by Marshal Victor, and by a movement which the king himself made in La Mancha with his guard, the Dessolles divisions, and the fourth corps under General Sebastiani, the army of Venegas had been driven beyond the Sierra Morena. The English army, after its expulsion from Coruña, had been disembarked in Portugal, whence it was now issuing under the orders of Sir Arthur Wellesley. Marshal Beresford with a Portuguese army was advancing on the upper Duero, and by this movement compelled Marshal Soult to fall back from Oporto on

the corps of Marshal Ney. The king, informed of this state of things by General Foy, whom Marshal Soult on leaving Oporto had despatched to him at Madrid, could not doubt that the enemy's object was to concentrate his forces and fall upon the capital, which he flattered himself would be found unprotected. The grand Spanish army of General Cuesta had then passed the Tagus at Almanez to form a junction with the English. The king instantly resolved to anticipate them by an attack at a distance from his capital. Marshal Mortier, whose head-quarters were at Villacastin, received orders to pursue the course which should be pointed out to him by Marshal Soult. The same order was transmitted to Marshal Ney. General Foy was despatched on his return to Marshal Soult's head-quarters, fully instructed in the views of the king, who was to advance in person with all his disposable force, comprising the first corps commanded by Marshal Victor, and the fourth corps which was then employed in keeping the army of Venegas in La Mancha in check, and covering Madrid, whilst Marshal Soult advancing rapidly, from the banks of the Duero by the Sierra de Francia, towards the Tagus, should take the allied army in the rear. On the twenty-seventh of July, 1809, the English and Spanish armies formed a junction at Talavera, and menaced the corps of Marshal Victor. The king had received no further intelligence from General Foy, or from Marshal Soult, and although he had every reason to hope that the movement which the marshal was ordered to make had been commenced, he was without any certain information on the subject. In the meantime he had only fifty thousand men to oppose to the English and Spanish forces which were double his own. The army of Venegas, on the other hand, no longer held in check by the fourth corps, and having gained several marches, was advancing on Aranjuez, and threatened to pass the Tagus at that point, and to fall upon Madrid, where all the resources of the government and the army must have been inevitably destroyed. In this critical posture of affairs the king determined to order an attack of the *plateau* which was occupied by the English army, Marshal Victor entertaining no doubt that the thirty thousand men under his command were sufficient to carry that position, provided the residue of the enemy's force, consisting of the Spanish troops before Talavera and those upon the Alberche, were kept in check.

The action was bloody. Talavera was evacuated by the Spaniards, and the French army remained in possession of the field of battle. By their own admissions the enemy lost more men than the French, but the *plateau* occupied by the English could not be carried. Yet upon the whole, the result of the action was favourable: the enemy, who, but two days before, threatened the first corps, was now checked by that same corps, and the king

having made a rapid movement on the *Val de Moro*, the Spanish army of Venegas, which had passed the Tagus at Aranjuez, now abandoned its designs upon Madrid, and retired. Reassured as to the fate of his capital, the king crossed the river, and entered Toledo. The rear guard of the combined English and Spanish army was overtaken at the bridge *del Arzobispo* by the corps of the three marshals and cut to pieces, and the army of Venegas, thirty thousand strong, which had given so much uneasiness to Madrid, being attacked on the fourth of August, at Almonacid, by the fourth corps, and the king's reserve was dispersed and destroyed. Its artillery, and a great number of prisoners fell into the hands of the victors. In these operations Marshal Jourdan acted as the king's major general. General Sebastiani, as has been already remarked, commanded the fourth corps; General Merlin, the guard, and General Dessolles, the reserve. It was not until after he had traversed the greater part of La Mancha that the king re-entered Madrid. He publicly expressed his satisfaction to General Belliard, who had manifested great firmness in the most trying circumstances, and to all those who had so efficiently seconded and supported him.

As the battles of Talavera and Almonacid had paralysed the enemy's movements, the king availed himself of the calm which ensued to regulate the administration of the interior. He now resolved to suppress entirely the religious orders, being convinced that the restoration of the finances, and the claims of public tranquillity alike demanded this measure. All ecclesiastical jurisdictions were annulled, and their duties assigned to the civil tribunals, and the privilege of sanctuary heretofore allowed to the churches, was abolished. The councils of the Indies, of the Orders, of finance, of the marine, and of war, whose functions were almost identical with those of the new council of state, were dissolved—the points for the collection of the duties, fixed on the frontiers—the municipal system was settled—laws regulating public education were digested in the council of state—the debt which had been formerly recognized, was guaranteed—the ashes and monuments of the illustrious dead scattered through the suppressed convents, were assembled in several churches, and particularly in the metropolitan at Burgos.

The buildings of the Escorial were assigned for the reception of fifteen hundred priests, members of the different religious orders who were desirous of continuing to live in common, either from family reasons, considerations of health, or a strong bias to consecrate themselves to study in those vast depôts wherein lay buried large collections of manuscripts and other literary treasures, so richly meriting examination and perusal. The buildings of St. Francis were chosen for the sittings of the Cortes and the alterations to be made in them put under contract. One hundred mil-

lions of reals were appropriated as an indemnity to owners of property who had suffered by the ravages of war. Joseph, faithful to the principles which had been crowned with such signal success at Naples, firm and immoveable amidst the host of prejudices excited by the bitterness of party-spirit, proscribed no individual because he had been a member of any particular corporation.

In his council of state were to be found superiors of religious orders, who voted for the suppression of those orders;* general officers of the insurgents who voted against the insurgents;† inquisitors voting against the inquisition;‡ and in his family and household, grandees of Spain openly advocating the most popular laws. In the towns recently abandoned by the enemy, he not unfrequently found hearts open to that confidence, and hope, with which his personal character inspired even his enemies—men who often made him the depositary of their former opinions, and the arbiter of their future fate.

A few months after his return to Madrid, Joseph received intelligence that fifty thousand Spaniards had made a descent from the Sierra Morena into La Mancha. He instantly marched against them, and came up with them at Ocaña, where they were entirely discomfited by twenty thousand French and four thousand Spaniards in his service. Twenty-five thousand prisoners, most of whom entered his army, thirty standards, and the entire artillery of the army were the fruits of this victory. The English who had advanced to Truxillo and Badajoz, where they remained tranquil spectators of the movements of their allies without participating in the action, retired to Portugal as soon as they learned the destruction of the Spanish army.

Upon his return to the capital, the king was informed of the successes of General Kellerman at Alba de Tormes, of Marshal Suchet in Arragon, and of Marshal Augereau in Cataluña, where Girona had fallen into his hands. He resolved to follow up this series of good fortune. The junta of Seville having summoned the Cortes for the month of March, he determined to anticipate them. Leaving Madrid on the eighth of January, 1810, a very few days after the battle of Ocaña, he found himself on the eleventh, at the foot of the Sierra Morena, with a force of sixty thousand men. Marshal Victor moved by the right on Almadin, General Sebastiani by the left on Lenares; the corps of Marshal Mortier, and the reserve commanded by General Dessolles entered Andalusia by the centre. Marshal Soult acted as major gene-

* Father Rey, General of the Augustins.

† Lieutenant General Morla, who long held the command at Cadiz and Madrid.

‡ The Abbé Llorente, former secretary of the inquisition, councillor of state, author of a very candid and liberal history of the inquisition—died at Paris a few years since. The Grand Inquisitor, Arce, Archbishop of Saragossa.

ral in place of Marshal Jourdan, the latter having returned to France. The positions of the enemy were carried in a few hours, and eight or ten thousand prisoners taken.

The king was attended by his ministers and the principal officers of his household and guard. He openly announced his intention to hold the Cortes at Grenada in the month of March. Cordova surrendered to him without firing a gun, and it was in this city that he received, from the hands of the archbishop, the French Eagles, which had fallen into the power of the Spaniards, after the disastrous affair of Baylen. They had been left in the cathedral, where they lay hidden amongst relics of the saints—they were instantly forwarded to Paris by Colonel Tacher de la Pagerie.

The people who had been grossly deceived by the calumnies infused into their minds in regard to the French armies and their chief, were now enlightened by the respectable Spaniards who surrounded the king, as to his views, his character, and his personal qualities, and were thoroughly convinced that no intention existed of subjecting Spain to France, but that on the contrary it was resolved to establish peace between the countries, and to propose a call of the true Cortes, who, fairly representing the whole nation, should be absolutely free to accept or refuse the king whom the junta of Bayonne had given them, and to whom their former princes themselves had sworn allegiance. Joseph pledged himself, without reserve, that as soon as the English evacuated the peninsula, the French armies should also leave it, and that he would follow in their steps, unless retained by the sincere wishes of the nation, when enlightened as to its true interests:—he stated that the constitution of Bayonne was now sufficient for the habits and wants of the people, but admitted that it might hereafter be modified and altered according to circumstances—that the nation could never enjoy a greater share of liberty than the king wished it to possess, inasmuch as he never could feel himself truly her king, until Spain was truly free, and delivered from the presence of all foreign armies. The expression of these sentiments, and confidence in their sincerity, opened the gates of Seville, of Grenada, and of Jaën. The Duke of Santa Fé, former Viceroy of Mexico, Minister of Charles IV. of Ferdinand and of Joseph, president of the junta, a man eminently popular and patriotic, entered Grenada with General Sebastiani, Marshal Victor advanced upon Cadiz, and the king made his entry into Seville, where he was received with enthusiasm. The chief of the municipality came out to meet him, after having conferred with several of his ministers whom he had despatched from Carmona, among whom were the Captain General O'Farrill and M. d'Orquiso, who, under Charles IV., had for some time acted

in the place of the Prince of Peace, in the management of public affairs.

Ten thousand men, however, under the Duke of Albuquerque had anticipated Marshal Victor at Cadiz—the English also hastened thither and strongly reinforced the garrison, whilst their squadrons blockaded the harbour. The chiefs of the insurrection themselves, of the four kingdoms of Andalusia, had assembled at Port St. Mary's, in front of Cadiz. They surrounded the king, to whom alone they looked for the termination of their sufferings, and from whom they received the assurance of his positive determination to assemble the representatives of the nation at Grenada immediately. All the members of the central junta were to form part of this Cortes—all the bishops—all the *grandees*—all the wealthy capitalists. This truly national assembly would have a single question to discuss—

“Do we or do we not accept the constitution and the king offered to us by the junta of Bayonne?”

If the negative was pronounced, Joseph would leave Spain, fully determined to reign, if at all, by the consent of the people, as he wished to reign for their benefit.

Enthusiasm had electrified all hearts and intoxicated all heads. But the deputies, who undertook themselves, to go and treat with their fellow citizens, unfortunately embarked in small boats, and were detained by the English squadron, and not allowed to land in Cadiz.

On the other hand, the French government was becoming weary of the enormous sacrifices which the obstinate resistance of Spain cost them. They thought that the war there, as in other countries, ought to support itself. The king's system, on the contrary, forbade exactions, and tended to calm the exasperation of the Spaniards by kind treatment. He consequently required that France should continue her sacrifices and her expenditure. About this time a measure was adopted by Napoleon, which gave the king the most lively concern. An imperial decree instituted military governments in the provinces of Spain, under which the French general of division became president of the administrative junta, and the Spanish intendant was reduced to the station of a simple secretary of the body in which he had formerly presided. This state of things could not fail to destroy all the good which had been effected by the glorious campaign of Andalusia—a campaign planned and executed by the king himself, who had now become impatient to have his fate decided, be the result what it might—king of Spain by the will of the Spanish people, or prince of France by the French and in France. At the opening of the Andalusian campaign, major general the Duke of Dalmatia, to cover his own responsibility, had required an autograph letter from the king, previously to transmitting his orders for this expedition, which had not been directed by the emperor.

Abandoning, now, all hopes of bringing about the surrender of Cadiz by the conciliatory measures which he had employed, Joseph left Port St. Mary's to visit the eastern part of Andalusia, and directed his route through Ronda. In the course of this journey, he expressed to the deputations from Grenada, Jaën, and Malaga, his firm resolution never to consent to any dismemberment of the monarchy, or to any sacrifice whatever of national independence—very far, in these particulars, from entertaining the sentiments of Ferdinand, who had actually proposed to the emperor a cession of the provinces on the Ebro.

On his return to Seville, the king issued decrees prescribing territorial divisions, organizing the civil administration within these districts, and directing the formation of national guards. The preparations for the siege of Cadiz were completed, but perceiving that it must necessarily be protracted, and feeling the obligation of repairing to the centre of the kingdom to remedy, as far as possible, the evils produced by the military governments erected in the provinces, Joseph intrusted the command of the army of Andalusia to Marshal Soult, and returned to Madrid, after an absence of five months. The Duke of Santa Fé and the Marquis of Alménara, two of his ministers, were despatched to Paris. The latter was the bearer of a letter from Joseph, announcing his determination to leave a country where he could neither do good nor prevent evil, if the system of military governments were not abandoned. The situation of the emperor was then so complicated and critical, that he could not yield to the wishes of the king. The two ministers on their return to Madrid, entertained hopes of a change, but no positive effect resulted from their mission. King Joseph proceeded in person to Paris, where he had an interview with his brother. The emperor induced him to return to Spain, by the positive assurance which he gave him, that the military governments should soon cease: that the system had already wrought a good effect upon the English government, who offered to retire from Portugal, if the French troops would evacuate Spain, and to recognise King Joseph, if the Spanish nation recognised him, and France would also consent, on her part, to recognise the House of Braganza in Portugal. The different military districts were to be put under the command of King Joseph—the Cortes convened—and the French armies to evacuate Spain as soon as the king was satisfied that their presence was no longer necessary.

It was in the hope of a successful issue to the negotiation with England, and of the faithful execution of the emperor's promises and guarantee, that he returned to Madrid, where he had every reason to be gratified with his reception.

The subsequent events of this war must be rapidly touched. Marshal Massena, who had entered Portugal at the head of an

army of seventy-five thousand men, after taking Almeida and Ciudad Rodrigo, and defeating the English at Busaco, was compelled, in March, 1811, to withdraw his troops, then reduced, by sickness, forced marches, and want of provisions, to thirty-five thousand. Marshal Soult laid siege to Badajoz, which surrendered on the nineteenth of March. Marshal Victor had been attacked in his lines at Chiclana. The English had kept alive the flames of insurrection, by landing troops, money, and arms at Carthagena and Alicant, and encouraged, by every means in their power, the resistance of Cadiz. It was at this moment, that the first rumours were circulated of the approaching rupture between France and Russia.

The English, no longer held in check by the army of Portugal, had occupied Ciudad Rodrigo, and Badajoz. Marshal Victor, the remainder of the imperial guard, and several regiments of the line were recalled to France. All hopes of a negotiation with England had vanished; partial insurrections multiplied; new guerrillas were formed, who were cherished by the gold of the English and the exasperation of the inhabitants; the communications became more difficult than at any previous time. Navarre was ravaged by the band of Mina, now swelled to an army—famine was laying waste the capital and the provinces. Such was the face of affairs when the Emperor Napoleon, setting out on his Russian campaign, invested King Joseph with the command of the armies. Under such circumstances, honour no longer permitted him to retire from a post of difficulty and danger.

Marshal Jourdan returned to him. In the early part of May, 1812, the English having taken the fortifications erected for the defence of the Tagus, threatened at the same time the army of the south and the army of Portugal. Either of these armies, if isolated, was too feeble to offer effectual resistance to the enemy—mutually sustaining each other they might combat with reasonable hopes of success.

Joseph ordered Marshal Soult and Marshal Marmont, then in command of the army of Portugal, to keep themselves in a condition to lend support to each others movements. Receiving advices that the English had advanced upon the Coa, he saw that their whole weight must fall upon Marshal Marmont, and immediately despatched Colonel Desprez, his Aid-de-camp, to Marshal Soult, with orders to him to augment the corps of Count d'Erlon to twenty-five thousand men, to let him pass the Tagus on the first advices and form a junction with Marshal Marmont. In the mean time the English had passed the Aguida and arrived on the Tormes, near Salamanca. Joseph being informed, on the first of July by a despatch from Marshal Marmont of the non-performance of his orders, reiterated them to the army of the south and the army of the north, and marched in person from Madrid with

the guard and the troops of the neighbouring garrisons. He reached *Blasco-Sancho* with fourteen thousand men, and directed his march on *Penaranda*, where the junction was to be effected. He there learned with pain and mortification the result of the battle of *Arapiles*. Marshal Marmont, although informed of the king's movement, without waiting for the reinforcements which were to join him from the army of the north on the twenty-third and from Madrid on the twenty-fourth of July, had passed the *Tormes* on the twentieth, given battle and been defeated. His army in full retreat was followed by the English forces whose pursuit was only checked by the presence of the king's corps. Information which he received in a letter from Marshal Marmont brought by Colonel Fabvier, namely, that the army of Portugal might keep the left bank of the *Duero*, and form a junction with that of the king, if it were not abandoned, induced him instantly to march upon *Segovia*—a bold and even rash movement if the French army of Portugal should have passed the *Duero*, and in fact that army had crossed the river at *Tudela* pursuing its retreat on *Burgos*.

Joseph feeling secure of the army of Portugal, which as it approached the *Ebro*, must be reinforced by the entire army of the north, but apprehensive of the fate of his capital and the centre of the kingdom, left *Segovia* on the fourth day and returned to Madrid. He hoped to be able to maintain that position if his orders issued to the army of the south, promptly executed, should bring him a corps of twenty-five thousand men: but in either hypothesis, as he was determined to leave Spain only with the last of the French, he resolved to advance and form a junction with those who were far in the peninsula—return in force upon the grand Anglo-Hispano-Portuguese army—cut off its retreat, or give battle with advantage. This plan was executed happily, notwithstanding the obstacles of every species which he had to surmount.

The English horse was overthrown by General Trelliard's cavalry under the walls of Madrid. A corps of twelve or thirteen thousand men, landed at *Alicant*, were marching on *La Mancha*, but on receiving intelligence of the king's advance, retreated, and returned to their place of debarkation. In a word, the armies of the south and the centre formed a junction at *Fuente-Higuerra*, whither Joseph repaired and issued the necessary orders for executing the movement he had conceived. On the third of November he returned to Madrid: the army of Portugal, apprized of his views by General Lucotte, Aid-de-camp of the king, who had been dispatched from the army of Arragon, pursued the retrograde movement of the enemy's armies who were evacuating *Burgos*, but without pressing them. Having remained a single day at Madrid, Joseph passed the *Tormes* and found himself on the bat-

the field of Arapiles at the head of more than a hundred thousand men. The enemy's force probably amounted to an equal number, but consisting, as it did, of the troops of three different nations, the victory could not be doubtful. The king having seen the movement commenced under his own view, by which the army of the south was to intercept the route from Salamanca to Ciudad Rodrigo, and thus cut off the enemy's retreat to Portugal, proceeded at once to his own army of Portugal, which arrived on the same battle ground, burning with feelings which may be easily imagined. But the rain, which had been falling in torrents, had rendered the roads nearly impassable and greatly retarded the movements of the army of the south. The English profited by this delay, and hurried their retreat by the road of Ciudad Rodrigo, which still remained unoccupied. The success of this day was limited to five or six thousand prisoners, among whom was the English general of cavalry, Lord Paget. The king entered Salamanca with the army of Portugal. This day ought to have counterbalanced the disasters of Russia, but fate ordered otherwise. The enemy retired to Portugal, and the French army soon found itself weakened by the loss of more than thirty thousand men, who received orders to repass the Pyrenees.

At this period a Spanish force that had advanced into La Mancha, made propositions to unite with the king's forces. He authorized one of his aides-de-camp to treat with this body, and was still in negotiation with its chiefs, when he received a positive order from the emperor to leave Madrid and take up the line of the Duero. The state of affairs in Russia made obedience to this order a matter of positive duty. Compliance was unavoidable, and the departure of the king for Valladolid took place instantly. As soon as Madrid was abandoned, the fires of insurrection were kindled, and raged with greater violence than ever. The Spanish officers who, as in the case of the army mentioned above, were all discontented with the proceedings of the regency which had placed them under the orders of the English, were compelled to dissemble, to conceal their dissatisfaction, and were thus thrown into the arms of the enemies of France. Spaniards, English, Portuguese, all advanced upon the French army, then enfeebled by the loss of its best officers and non-commissioned officers, who had been withdrawn to aid in the formation of new corps in France.

At Valladolid the king remained no longer than was requisite for the assembling of the different corps that were on the Tormes, and resumed his march as soon as they were embodied.

But it was impossible for him to maintain consistency or unity of plan in the ulterior operations. The minister of war in France corresponded directly with the chiefs of the armies of the north, of Portugal, and of the troops stationed in the provinces of

the Ebro, and not unfrequently issued orders for retrograde movements to corps who were to be replaced by those of the line. By this course of things, the latter were so far reduced that they were compelled to concentrate upon Burgos without fighting. The corps of General Clausel received orders direct from France to proceed to Navarre against Mina.

The king, after leaving Burgos, passed the Ebro, and took a position before Vittoria, hoping to avoid an action until the corps of General Clausel had rejoined him. This hope was delusive. General Clausel was unable to return or to partake in the glory of that battle of Vittoria, where thirty thousand Frenchmen in line disputed the victory with more than a hundred thousand enemies. By the confession of the English their loss on that occasion surpassed that of the French army.

Joseph, pressed by the solicitations of more than two thousand Spanish families who had followed his fortunes, could not resist their entreaties for an escort to accompany them to France, where they arrived in safety. This detachment left him before the action.* Clausel had joined the army of Arragon.

The king left a garrison of four thousand men in Pampeluna. The retreat was effected in good order. The troops of General Foy, those of the neighbouring garrisons, and those posted on the lines of communication, were drawn in and united to the mass of the army, which then found itself about fifty thousand strong. But it was no longer time to think of Spain.

In the north the victories of Bautzen and Lutzen had laid the spirit of the storm for the moment, but the entire strength of France would have been insufficient to resist the hosts of foes who had conspired against her.

Joseph returned to Paris, where his brother, the emperor, again left him with the title of his lieutenant when he departed to put himself at the head of that army, which, after assailing all the armies of Europe in their respective countries, was at last reduced to defend itself on its own soil.

The empress, Maria Louisa, was left regent of the empire. Joseph, as the emperor's lieutenant, had the honours of the military command. The remnant of the guard was under the orders of General Caffarelli—Marshal Moncey commanded the National Guards—General Hulin the troops of the garrison. Joseph was left as counsellor of the empress, together with the prince arch-chancellor of the empire, Cambacères. The empress had instruc-

* Certain malicious or ill-informed writers have alleged that this escort was principally intended to accompany the equipages of the king's household: the fact is, that neither those equipages, nor the chests of the treasurer of the civil list, formed any part of this convoy—that they remained near Vittoria where they were pillaged, and that M. Thibault, the treasurer of the civil list, and several of his *employés*, were killed there.

tions to follow the advice of these counsellors. In this singular predicament of public affairs, Joseph refused no duty which his brother saw fit to impose.

If the events of the war should intercept all communication between the imperial head quarters and the capital, and the enemy make his way to Paris, he had verbal instructions from the emperor, and after his departure *a written order, to remove the king of Rome and the empress*, to proceed with them to the Loire, and to cause them to be accompanied by the grand dignitaries, the ministers, the officers of the senate, the legislative body, and the council of state.

Joseph soon after had ample reason to acknowledge the judgment and foresight which had dictated these precautions. At first, his attention was excited by covert insinuations and whispers, and afterwards his suspicions of disaffection were fully confirmed by more open and explicit remarks. Reserve was thrown aside, and many senators no longer dissembled their opinions in favour of proclaiming Napoleon the Second, or the regency of the empress, and the lieutenancy of Joseph under an infant emperor. It was then that Joseph made known to his brother the necessity of concluding peace upon any terms; and when the slender corps of Marshals Marmont and Mortier were brought under the walls of Paris, when they declared that they were pursued by an enemy vastly superior, that all communication between the emperor and his capital was cut off—the case provided for in the verbal and written instructions of Napoleon was admitted to have arrived. Joseph then communicated to the empress and the arch-chancellor the last letter from his brother, which recognised and confirmed his former directions. The ministers, the grand dignitaries, and presidents of the sections of the council were assembled to the number of twenty-two members. They all admitted that the case provided for had occurred; and that it was better to leave Paris to its own authorities, and to its own particular forces than to hazard the fate of the emperor, and thereby endanger that of the entire empire.* The minister of war, (the Duke de Feltre,) declared that there were no arms ready, that they were daily given out to the new levies as they departed, and that they were exhausted. Thus it was unanimously decided that the government should be removed to Chartres, and thence to the Loire.

But Joseph remarked they were yet uninformed as to what

* It is a curious fact that foreigners judged more correctly than those in the legislative councils of France who opposed the designs of the emperor when he was in conflict with the allied sovereigns and the oligarchy of Europe. The late Ex-president Adams made this remark in reply to a French general, and to Baron Quinette, of the Chamber of Peers, and member of the French Government in 1815, whom he invited to his table some years since—"You did not understand the Emperor Napoleon."

enemy they had to do with: that the advancing forces might be reconnoitred and measures adopted on the result of that reconnoissance. He offered not to set out with the empress. The ministers of war, of the administration of war, and of the marine, concurred with him, and promised not to return to the empress except in the last extremity, when they should be convinced that they were retiring before the entire mass of the allied armies. If, on the contrary, upon reconnoitring, it should appear that they had only a detached corps to resist, which they could destroy without exposing the capital, they would support the two marshals with all the means under their controul. It was in the hope that the last hypothesis might prove correct, that the proclamation of King Joseph was drawn up and published that evening. The council applauded these generous and disinterested offers and the emperor's letter passed into all hands.

The empress, her son, the court, the members of the government, the ministers, M. de la Bouillerie, treasurer of the crown, with the funds intrusted to him, took their departure. During the night the marshals were informed of the enemy's approach. The next morning they were in conflict with the out-posts. Joseph, accompanied by the ministers of war, of the administration of war, and of the marine, agreeably to the resolution of the council, left Paris to investigate the actual state of affairs more closely. The National Guards were put under arms to maintain internal tranquillity, and posted at the different gates to prevent any insult which might be attempted by detached corps.

In the morning Marshal Marmont having sent the king information that he was too weak to repel the troops then before him, the king directed Marshal Mortier to reinforce him; an order which was promptly complied with. In the afternoon an officer of engineers of the French army taken prisoner by the enemy, had been admitted to the presence of the Emperor of Russia, the King of Prussia, and the Austrian Generalissimo. This officer had seen the enemy's army drawn out, and came to make a report to the marshals, and afterwards to the king. Marshal Marmont declared that he could not hold out longer than four o'clock, nor prevent Paris from being inundated with irregular troops during the night. He demanded authority to treat for the preservation of the capital and the security of its population. Some legions of the National Guards solicited permission to place themselves in line of battle outside the walls—it was refused, lest Paris might be deprived of their support where it could alone be useful, in the interior and throughout the immense extent of its enclosure. The decision of the council under the presidency of the empress regent was literally carried into execution under these trying circumstances, when the ministers, who were with the king, admit-

ted that the greatest part of the allied forces was under the walls of Paris. They did not leave Paris until four o'clock, when they learned that the enemy had occupied St. Denis, and that in a few moments more it would be too late to cross the Seine. Joseph passing through Versailles ordered the cavalry at the dépôts in that city to follow him, and proceeded to Chartres, where he found the empress, and thence to Blois.

Great censure has been cast upon King Joseph for his proclamation, in which he assured the National Guard that he was not to accompany the empress, but would remain at Paris:—There is little justice in the exceptions taken to his conduct. No one can doubt that such were his intentions, and those of the council, which was then held, and the object of the immediate annunciation of their views can be readily conceived. But a few hours afterwards every thing was changed by the arrival of the whole allied army under the walls of Paris. There remained to King Joseph the choice of three courses: To accompany the empress to the point designated by the emperor: to remain at Paris, or to follow the army of Marshal Marmont: certainly there was no room for hesitation in selecting from among these expedients. Joseph, in following the regent, did his duty. Would he have acted more wisely in voting for the stay of the empress? Could he with honour deviate from the strict path marked out in his instructions? Subjected to the commands of the emperor he was bound to obey them, and not to surrender his wife and son to the enemy. Ought he to have exposed himself to the chance of presiding at the dethronement of the emperor and to have made peace by the sacrifice of his brother? His orders in a given case, which actually occurred, were precise, to assemble on the Loire the national authorities around the regent, and to collect at the same point all the forces he could obtain. This order was punctually complied with: the armies of the Dukes of Castiglione, Albufera, and Dalmatia were yet untouched: if the emperor had reached the Loire, he might still have balanced the chances of war, when he found assembled under his hands all the resources which he had ordered to be there collected. "*Fay ce que dois, advienne ce que pourra,*" is without doubt the maxim of every public officer who respects himself.

The armies of Arragon and of Spain were disposed to receive any impulse which the emperor chose to give them, but the idea of resistance was abandoned, and the abdication of Fontainebleau left Joseph no choice but a retirement to Switzerland, where he remained until the nineteenth of March, 1815, the day on which he learned the arrival of his brother Napoleon at Grenoble. He set out alone with his children. At the sight of them the troops on the frontiers mounted the tri-coloured cockade amidst cries of

Vive L'Empereur! "*Vive la Nation!*" It was thus he crossed part of France and arrived at Paris on the twenty-second of March.

The loss of the battle of Waterloo having again brought foreign armies into France, Joseph retired to America where he originally expected to join his brother Napoleon, whom he left at the Isle d'Aix making arrangements for his departure to the new world. Fate disposed of him differently, but Joseph remained in France until after he knew that the emperor had left it.

Joseph was received in New-Jersey with the greatest kindness and respect, and a law was enacted expressly for his case, which was addressed to him, with expressions of benevolent courtesy, by the governor of that state, in 1817. By this act he was enabled to purchase and hold real estate there *without becoming an American citizen*. The mansion which he erected on his grounds fell a prey to the flames some years since; an occasion on which he received from the inhabitants of Jersey, the most touching proofs of affectionate interest.

Impartial and unbiassed judges of men, the citizens of the United States have been enabled to anticipate the decision of posterity and to pass upon the degree of credit which ought to be given to the countless slanders which have been invoked to blacken and vilify the name of the emperor and his family. Thus also it appears that the people of Naples and even of Spain, enlightened by experience, appreciated at their just value the incessant calumnies which were heaped upon their new monarch. Separated from his family and from his country by almost insurmountable obstacles, it is yet a source of gratification to believe as we sincerely do, that a rich store of enjoyment for the residue of life is secured to Joseph—a conscience void of offence—possessed of which, no upright man can fear solitude.

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